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ABSTRACT

This proceedings contains 20 papers from the 1995 International Conference on Outdoor Recreation and Education. The papers include guidelines for various aspects of outdoor leadership and materials relevant to program development and administration in outdoor recreation, outdoor education, and adventure therapy and education. Papers are: "ICORE Opening Presentation" (William E. Phillips); "Survival Building Teamwork and a Ropes Course in Mexico" (Jim Fullerton, Scot E. Davis); "Camping with Kids" (Joel Bouch); "Defining Responsible Stewardship: A Land Management Perspective" (Duane Gregg); "An Examination of Negligence, Assumption of Risk, and Risk Management in Outdoor Recreation" (Travis L. Teague); "Future Directions for AORE & 1995 AORE Membership Survey Results" (Jim Fullerton, Tim Moore, Steve Guthrie); "Is Cheese Food Really Food? e.k.o. Some Conscious Alternatives to Overprocessing Experience" (Cheryl A. Bates, Steven Tomb); "Land access, Protection and Permits" (Steve Muncell); "Managing Growth in Four Outdoor Recreation Rental Programs" (Bob Jones, Brian Wilkinson); "Minimum Impact Techniques for Outdoor Leaders" (Mark Simon); "Organizing a Climbing Competition" (Tim Steele); "Re-Establishing a Clean Climbing Ethic" (Aram Attarian); "The Role of Tacit Knowledge in Judgement and Decision Making" (Steven Guthrie); "Teaching Technical Skills through Play" (Laurie Gullion); "Therapy in the Mountains" (Judith A. Rennison); "Ultem Rope-handling Techniques" (K. Ross Cloutier); "Using Importance-Performance Analysis to Evaluate Teaching Effectiveness" (Aram Attarian); "When Bambi Meets Godzilla: Bringing Environmental Education and Outdoor Recreation Together" (Curt Schatz); "Whitewater River Accident Analysis" (Ron Watters); and "Wilderness Emergencies: A Practical Approach to Decision Making" (Gerard Dunphy). Appendices include workshop materials, the conference program, and a list of participants. (SM)

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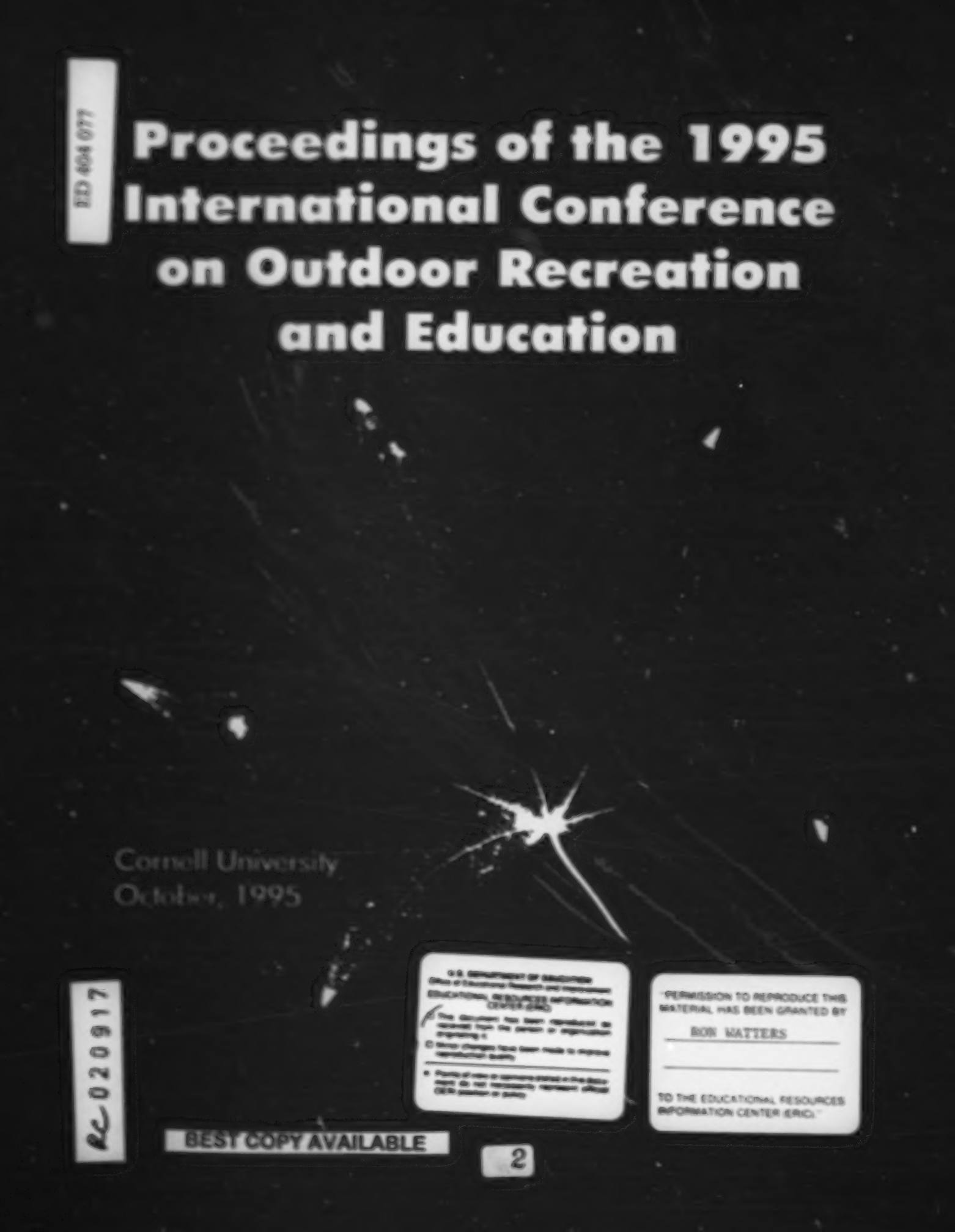
Proceedings of the 1995 International Conference on Outdoor Recreation and Education



Cornell University
October, 1995

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Proceedings of the 1995 International Conference on Outdoor Recreation and Education

Held at Cornell University
October, 1995

Edited By
Rená Koesler
Ron Watters

Published by Idaho State University Press

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Introduction

Each year, the International Conference on Outdoor Recreation and Education is a spirited and productive exchange of information between professionals, students, researchers and interested individuals involved in nonprofit outdoor educational programs across Canada and the United States. Represented at the conference are university and military outdoor programs, academic departments, and other nonprofit programs.

The 1995 conference held at Cornell was sponsored by the newly formed Association of Outdoor Recreation and Education. The Association was formed by conference participants largely to assure that the conference will held each year and to assist in other forms of networking and disseminating information between outdoor recreation programs.

The Cornell conference, the ninth since the conferences began in 1984 in Bozeman, Montana, broke new ground. An area, called "tent city," was provided as an inexpensive option for students and other attendees to camp-out during the conference. The main meeting area, located in the Alberding Field House, was decorated with a forest of live trees. Rising above the Alberding forest was the expansive Linseth Climbing Wall which was available throughout the conference for climbing.

Attending and presenting at the conference were some of the distinguished founders of the modern outdoor recreation movement including Paul Petzoldt, Josh Miner and Royal Robbins. One of the most memorable events occurred during Dan Tillemans' conference introduction. In the midst of Tillemans' presentation, a rope bag slammed on the podium, and from the rafters of the field house, Bill Phillips, Trustee of Cornell and Chairman of the Board of International Outward Bound, appeared, dangling from a climbing rope. Bill began his keynote address, which is included here, as he rapelled to the floor.

After Phillips, Paul Petzoldt, his eyes failing him, had to be aided to the podium to begin his talk. But despite his condition, he had not lost the unfailing spirit which had carried him to the heights of K-2 on the first American expedition to the mountain and guided him through the development of such lasting outdoor educational institutions as National Outdoor Leadership School and Wilderness Education Association. With his landmark brushy eyebrows arcing as he spoke, Petzoldt announced to the conference that he would win in the battle to regain his eye sight.

From the admonishments of Outward Bound pioneer Josh Miner that you have more resources that you think to Royal Robbins' story of treating his arthritis by taking up kayaking, the conference — like past conferences — was inspirational as much as it was educational.

This publication has been assembled as means of sharing information presented at the conference to those who were unable to attend. For those of us who did have the opportunity to attend, it serves a formal, written record of conference programs and events.

The field of outdoor recreation has come a long way since the first conference in 1984. But the Cornell conference demonstrated that it has still retained its informal atmosphere where networking and the exploration of new ideas and concepts remains paramount.

Acknowledgments

A special thank you is extended to all those who helped make the 1995 International Conference on Outdoor Recreation and Education a success. Particular thanks is due to Jen Whiting, Cornell Outdoor Education and Conference Chairperson; Dan Tillemans, Director of Cornell Outdoor Education; Jim Fullerton of the University of Nebraska-Lincoln and President of the Association of Outdoor Recreation and Education (AORE); and Renâ Koesler of Longwood College and Chairperson of AORE's Conference Committee. The conference organizers also express their appreciation to the many volunteers who contributed to the conference by helping with logistics or taking time to present and develop papers for the proceedings, and to Paul Petzold, Josh Miner, Bill Phillips, Lucy Smith and Shari Kearney for sharing reminiscences from the past and insights into the future.

Highlights of Conference

The 1995 conference, held October 26-28, 1995, at Cornell University in Ithaca, New York attracted 335 participants from the United States and Canada. The conference was hosted by Cornell University Outdoor Education. Here are a few highlights from the conference:

- A central meeting area in front of the Lindseth Climbing Wall decorated with live trees and accompanied with the recordings of bird songs.
- Paul Petzoldt and Josh Miner, opening keynote speakers
- Bill Phillips rapelling to his place behind the podium
- Dan Tillemans' slide presentation of a 100 day solo wilderness trek across Arizona
- The long, steep walk up the hill to the conference site
- Initiative games which involved being on skis for two hours: "I can't move anymore."
- Association board meetings which lasted to 3:00 am: "I can't think anymore."
- Great meals three times a day
- The climbing wall which provided a place to let off steam
- The decision for AORE to continue to be a part of ORCA
- Lucy Smith and Shari Kearney's slide presentation on their Himalayan expeditions
- Royal Robbins' presentation on 40 years of adventure
- Salute and recognition of the late Jim Rennie, one of the originators of the conference

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W.E. Phillips
Trustee of Cornell University
Chairman of Board of International
Outward Bound

ICORE Opening Presentation
26 October 1995
Cornell - COEP

Open Session:

Bill Phillips rappells from the ceiling to his place behind the podium

"Welcome!"

Last fall's program announcement of the Cornell Outdoor Education Program carried a wonderful quote from Edward Abbey, the great Western States Environmentalist -- "The long journey starts with the first step -- not the turn of the ignition key." All worthwhile journeys or accomplishments in life require involvement and idea wa well as dedication and perseverance. We're sure this Conference can be a learning experience for all of us. Experiential education -- that's what we are all about. We are pleased so many of you are here to share your experiences, and hear a host of leaders in the field.

Experiential education -- personal growth through outdoor challenges and reflections is such perfect complement to academic learning. It is reality. You learn by doing.

And now let me say a few words about Kurt Hahn -- who may be unknown to some of you here. He was the Founder/Headmaster of the Salem School in Baad, Germany before World War II. His protests against what Hitler was doing to the jews landed him in jail, but some of his powerful English admirers extracted him to Britain where he became the Founder/Headmaster of the Gordonstoun School in Scotland, educating the youth of the powerful in Europe. The Outward Bound Patron, Prince Philip, HRH The Duke of Edinburgh, graduated as first in his class at Gordonstoun. Kurt Hahn was interested in both sides of the report card -- the academic and the development of character and values. The motto of the Gordonstoun School was 'Plus est en Vous' taken from the wall of a small sixteenth century chapel in Belgium. It translates into 'You have more in you than you think' -- and isn't that the challenge of education -- build the confidence of young people to aspire and have the self-reliance to accomplish.

In the forties, Kurt Hahn declared that modern civilization was causing six social diseases -- declines in fitness due to modern transport; declines in initiative, due to the widespread disease of spectatoritis -- just sitting there and watching; declines in skill and care, due to the weakening tradition of craftsmanship; the decline in self-discipline, due to the availability of stimulants; decline in memory and imagination, to the confused restlessness of modern life; and, above all, the decline in compassion, due to the unseemly haste with which modern life is conducted. Today, fifty years after the founding by Kurt Hahn of Outward Bound at Aberdovey, Wales -- his observations are more true than ever.

Recently, a new world forum was convened in San Francisco with important delegates from around the world -- including an opening panel of George Bush, Michael Gorbechov, and Margaret Thatcher -- the Iron Lady -- in discussing the challenges of the world -- Margaret Thatcher described people today increasingly belonging to a 'dependency culture'. What a precise way to describe a civilization where people wait for someone else to do it for them. What has happened to the moral imperative to fix things that are not right. And this must come from the education of our youth -- academic, and, character and values through positive activities like Outdoor Education.

At Cornell we have established our Outdoor Education Program to fulfill an mission that relates to the outcomes that our alumni have told the university it expects from graduates.

Cornell Outdoor Education Mission Statement:
"We enhance academic performance and success in life by developing leadership, teamwork, and personal achievement through experience-based education in the outdoor environment at Cornell University and around the world."
We serve the broad membership of the Cornell community: students, instructors, faculty, staff, alumni, and friends.

To achieve this mission, we are committed:

- To develop leadership, teamwork, and effective group interaction skills
- To empower individuals to move beyond self-imposed limitations
- To develop initiative, self-reliance, ethical standards, and compassion for others
- To teach safe outdoor skills as a means to personal growth, lifelong fitness, and recreation
- To promote environmental awareness and responsibility"

Your needs may be different from Cornell's -- but we trust that this Conference will help all of us build better citizens for tomorrow. I believe that every college student has a few teachers or professors who really impact their lives -- this can be great compliment to you when you can fill this role!

In closing, before you hear from two individuals who laid the foundation of Outdoor Education in the U.S. -- Josh Miner for Outward Bound and Paul Petzoldt for NOLS -- let me repeat to you the wisdom of the old Sioux chief who said "Man has two functions on this planet --
to educate youth in the traditions and values of their society to continue its existence
to leave the planet in the same physical condition -- the environment -- as we find it.
Simple. But true. Your work is very important. Welcome. And thank you for coming. Let's do it now.

¡Arriba! Building Teamwork and a Ropes Course in Mexico

by
Jim Fullerton
and
Scot G. Davis
University of Nebraska-Lincoln

Abstract

Will classic Project Adventure-style challenges work in Latin America? After the construction of 10 low ropes course elements in Yucatan, Mexico, during the summer of 1995, the answer appears to be an emphatic "yes."

This project was spearheaded by the University of Nebraska-Lincoln, and came to fruition through cooperation with the Mexican Conservation Corps, Partners of the Americas, and the Yucatan Cultural Foundation, with funding by Coca-Cola of Yucatan, Mexico.

The following first-person narrative is by Scot Davis, Graduate Assistant for the Office of Campus Recreation Outdoor Adventures program at the University of Nebraska-Lincoln. Scot has led many trips into Mexico, and coordinated the construction of the first ropes course in Yucatan, Mexico.

Narrative

In October, 1994 I was asked to join the Assistant Director for Outdoor Recreation, Jim Fullerton, on a tour of Yucatan, Mexico. Leticia Roche, Director of the Yucatan Cultural Foundation, invited us to come down and explore trip possibilities for the Outdoor Adventures program (University of Nebraska-Lincoln), and a possible future conference site for the International Conference on Outdoor Recreation and Education (ICORE). Jim had met Leticia when she visited the United States in 1993 to see the new Arbor Day Foundation conference center in Nebraska City, Nebraska.

During this visit we were able to spend a great deal of time discovering the natural and cultural attractions of the Yucatan. One evening, on the drive back from the archeological site Uxmal and the Hacienda Tabi, we were discussing working with at-risk youth using different "outdoor" interventions including challenge courses. Leticia had visited (and participated in) a ropes course in Nebraska during her visit the previous year. This experience made her very familiar with the feelings of accomplishment and increased self-esteem that go along with participation in challenge course activities. Our discussion continued and we discovered a void that needed to be filled. There were no challenge facilities in Yucatan for groups to use. We decided to pursue the idea of constructing the first ropes course for the people of Yucatan to use.

During the next nine months, plans were made for funding and construction. The site was to be the Hacienda Tabi. Tabi[1] is five-hundred years old! During its peak as a working sugar hacienda it employed 2,500 indentured servants and covered an area of nearly 40,000 acres. Tabi is also in a central location on the Yucatan Peninsula. Funding was granted by Coca-Cola of Yucatan for the amount of 20,000 pesos (approximately $3,500 U.S.). Construction was to be supervised by myself and built with the human-power of the Mexican Conservation Corps[2] directed by Sal Munoz.

Most of the equipment and parts were thought to available in Mexico. Mexico has very high import taxes to discourage any non-Mexican made products from being used in Mexico. To begin with I brought 500' of braided rope[3], large steel washers, and my climbing and safety equipment. The plans were set and on the morning of July 20th, 1995 the journey began.

My tasks, during my stay in Mexico, turned out to be two-fold. Construction of a ten element ropes course was the first priority. I soon discovered, however, that the students who were working with me had never had any "new games" or initiatives facilitated with them. This became a daily ritual. Let the juegos (games) begin!

A little about the group I was working with... The Mexican Conservation Corps is based out of Mérida, which is the capital of Yucatan. Sal Munoz, who transferred directly from the California Conservation Corps, is the full-time director in Mexico. For the summer of '95 he had 60 students volunteering for the 28 day experience. There were two projects at Tabi, the ropes course and the construction of an authentic Mayan house (hut) and adjoining kitchen. Two other "out" projects were also underway. One, in Punta Lagunas, worked on constructing a nature trail through an estuary along the coastline. The final project was in Chiapas, repairing and improving homes in the area. The 60 students, who ranged from 15 to 25 years of age, were divided into four groups of 15, and rotated (weekly) through the four projects. At any point in time there were 30 students at Tabi.

---

1 Tabi has been "given" to the Yucatan Cultural Foundation, for a 10 year period, by the Mexico government for restoration and economic development for tourist dollars.

2 The Mexican Conservation Corps is an offshoot of the California Conservation Corps and has been funded and developed by Partners for the Americas out of Washington D.C., and overseen by John Chater who is the Regional Program Coordinator for Partners.

3 All technical equipment for the course at Tabi was purchased from Starlight Outdoor Education Products out of West Virginia, USA.

Our daily schedule was as follows: Desayuno (breakfast) was at 7:00a.m. We worked from 8:00a.m. to 1:00p.m. and then had lunch (almuerzo)[1]. Siesta was until 4:00p.m. during which time some slept, others played soccer, and some did laundry[2]. Presentations and free time were until 7:00p.m. which was time for dinner. The remainder of the evening was free time.

I did two presentations, one for each set of two groups, at Tabi. We discussed each element being built, philosophy of team building and group building activities, and the history and development of the "group challenge" idea in the United States. This lasted about an hour, then the fun began...the juegos[3] (games). Whether it was Magic Shoes , or Boggy's Marsh, or Human Knot, or whatever, they loved them all. This was probably the best part of my experience. There was such an incredible hunger for this kind of programming. Students and leaders alike simply could not get enough time playing. In my mind, this is a very strong statement on the need for humans (especially adults) to play[4].

During all this fun we had the not-so-small task of constructing a low ropes course, in the jungle of Yucatan, with only hand tools[5]. My first task was to select a site for the course. We chose one of the abandoned corrals. It was a large area (approximately 300' X 300') and was surrounded by a stone wall, built by the earlier occupants, which had two entrances with large iron gates. The following elements were chosen to be built:

---

1 In Mexico, the almuerzo is the largest of all three daily meals. It is basically a small feast intended to nourish the body from the morning's work, and provide enough energy to get through the day. It is typically very high in complex carbohydrates, low in fat, and extremely necessary (by noon the temperature could easily be over 100%f with 75% to 100% relative humidity).

2 We did laundry on what used to be Tabi's horse feeding area. This was a concrete covered slab approximately 30 feet long, four feet high, two feet deep (parallel to the ground), and somewhat concave so the oats and hay would tend to stay in the trough. A little soap, a little water, a scrub brush, and a lot of scrubbing (by hand), and voilá clean (mostly) laundry.

3 I use the term juegos because it became a daily ritual, either in the late afternoon or after dinner, for the group to begin shouting, "¡JUEGOS!, ¡JUEGOS!, ¡JUEGOS!!!" This was my invitation to provide a new "super cool" group initiative or game for the group.

4 According to Dr. Donald Greer, Assistant Professor of Recreation and Leisure Studies at the University of Nebraska-Omaha, play is defined as spontaneous, non-extrinsically motivated interaction for the sake of pure enjoyment.

5 We did rent the use of two gentlemen and their chainsaw (for cutting the phone poles) for about an hour.

Tire Traverse, Balance Beam, Triangle Traverse/Wild Woosy, Giant's Finger, Wobbly Log, three Trust Falls, Re-Birth, Nitro Crossing, and Spider's Web[1].

The next step was to "clear" the area. We created kind of a horizontal "ant farm" for our layout. The elements were to be in isolated areas (in the corral) and interconnected by a trail system. With shovels, rakes, sickles, machetes, hand saws, bow saws, and two wheelbarrows, we did it; and we managed to avoid the snakes[2], scorpions, gila monsters, and miscellaneous other hazards in doing so!

Following the clearing, we had to dig a series of 13 holes for the postas (telephone poles). With a nice gas-powered auger this would be a lot of work. With shovels and pry-bars, and having to go through a limestone layer, this was A LOT OF WORK! (For the record, it took us two weeks to prepare the course and five days to build it.)

Finally we were ready to build the elements. Unfortunately, we were still without the telephone poles, and a majority of the parts which I needed were actually unavailable in Mexico. The nearest city to Tabi is Ochtucab and it had only one "long distance" telephone which was in the local pharmacy. After four days of seemingly endless "phone" frustration, and three nights of wondering if all the work up to this point was futile, I finally got through to Starlight Outdoor Education in West Virginia. Not only did they have the equipment I needed in stock, and could ship it second day air to Mexico[3], but they were willing to wait and receive payment until I returned from the Yucatan. (We can not thank them enough for their willingness to help and go the EXTRA mile!)

The phone poles came, we cut them (actually the rent-a-cutters did that), sunk them, cemented them. The parts arrived, and after two days of continuous rain, we built the first ropes course in Yucatan, and to the best of my knowledge, the first ropes course in Mexico. On Friday, August 12, 1995, we dedicated and celebrated (with champagne, cake, singing, and much enthusiasm) this the "Premiere Curso de Desafios en México[4]" (Sal Munoz, Dedication Ceremony, 1995). The students would not stay away and for the next day and a half I trained their Sombras in safety, spotting, site management, and group

---

1 These same elements were constructed in 1995 at the University of Nebraska challenge course at Camp Easter Seal near Milford, Nebraska. It is hoped that "staff exchanges" will be possible if funding is available.

2 Two days after I left, one of the sombras (leaders) was bitten by a rattlesnake. They rushed him to the nearby "hospital", and he is doing fine!

3 Actually it took seven days for the equipment to reach Mérida. Two days to Mexico City, and five days (to find it in Mexico City) to Mérida. Don't get me wrong -I LOVE MEXICO! There is simply an adjustment of the interpretation time which has to be made in order to stay sane.

4 First Challenge Course in Mexico.

dynamics/processing. I am scheduled to return in April of 1996 to conduct a more extensive training with the staff for the 1996 summer Conservation Corps. And, I am very excited to be taking the first group of Americans through the course on a University of Nebraska Outdoor Adventures trip to the Yucatan, December 27, 1995 - January 6, 1996. The course weathered both hurricanes this fall and has had a number of groups facilitated through the experience since its construction. It will also be used for pre- or post-conference activities for the 1997 ICORE at the University of Yucatan.

I would like to personally thank: Noelle Davis, Jim Fullerton, Dr. Frank Brasile, Leticia Roche, Donna Rudolph[1], Sal Munoz, John Chater, the students of the 1995 Mexican Conservation Corps, the University of Nebraska-Lincoln, the Office of Campus Recreation, the Outdoor Adventures Program, Starlight Outdoor Education Products, the Yucatan Cultural Foundation, the Mexican Conservation Corps, Partners of the Americas, and Coca-Cola of Yucatan for making this vision take form and become a reality!

---

1 U.S. Representative of the Yucatan Cultural Foundation.

Camping with Kids

By

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Abstract:
This session will focus on preparing parents and leaders for meeting the special needs of children while engaged in outdoor activities ranging from day hikes to extended backpacking and canoeing adventures. The emphasis of this workshop is how to include children in existing programming rather than creating trips and workshops especially for that age group. This outline should be useful to outdoor programmers at non-traditional colleges, on military bases, or young professionals looking at getting jobs at summer camps and other professional outdoor agencies.

I. Overview: This seminar will focus on the following topic's
   A. Administrative and Programming concerns of the program.
   B. First Aid Basics
   C. General Concerns

II. Administrative and Programming concerns of the agency.
   A. Most outdoor programs use some type of Assumption of Risk form and Liability Waiver.
      1. Can not waive the rights of a minor.
      2. Neither child or child's parent can contract away the legal rights of the child to sue for ordinary negligence.
      3. Between age 7 and 14 is when most individuals develop comprehension of risks associated with certain activities.
      4. If program is not willing to take on the added liability, then they should not allow children and minors on their trips.
   B. Next you need to decide if the activity being offered is appropriate for children.
      1. Just about any activity can be modified to include children of every age group.
      2. Obviously the very young are just passive passengers with their parents.
      3. The chart at the end of this report will offer an indication of what certain age groups are capable of and some associated safety issues. Kennedy, M.D.

      4. Some activities will require equipment and gear that fits the individual participants.
         a. Remember how grumpy adult participants can get if their backpack doesn't fit or is improperly loaded.
         b. Kid's are the same way, and they may not tell you if something is wrong.
         c. Do not try to retrofit an adult sized piece of equipment to fit a child if the situation calls for proper fitting equipment.

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2. Before we allow participants, younger than college age, on an OVC trip I always clear it with the leader.
3. Especially if I won't be a leader on that trip.

D. Attempt to establish who is responsible for minor on an activity:
1. Do not allow the minor to participate without a parent or legal guardian present and participating along side the minor.
2. Convey to the parent or legal guardian that they are ultimately responsible for the safety and welfare of their child throughout the duration of the activity, service, trip, etc.
3. The leader can not be looked at as a baby sitting service, etc.

E. Staying found:
1. Discuss with children and parents how important it is for the children to stay close to the group and how to cope with getting lost if they should become disoriented.
2. Have parents and child read <u>Lost in the Woods: Child Survival for Parents and Teachers</u> by Colleen Politano.
   a. A small but vitally important book that tells the story of Calvin, who gets lost while camping with his family.
   b. Tells what each child should carry with them.
      1) Extra food and water.
      2) Whistle and knowledge of how to signal for help -- three blows.
      3) Extra clothing. Something with a hood.
   c. Contains learning activities that teach kids what to do and why when lost, including how to spend the night outside alone.
   d. Written at a very basic level but full of good information.
   e. ICS Books 1-800-541-7323, $6.99.

II. First Aid basics: Adapted from Buck Tilton.

A. The Basics:
1. You may have to rely on an adult for a complete history of an accident or injury involving a child -- Poor historians.
2. If at all possible, never separate the child from the people they trust.
3. Be observant. The way a child behaves will tell you a great deal about their medical status and severity of injury.
4. Perform a secondary survey from toe-to-head, not head-to-toe.
5. Gain their trust and examine the parts that hurt last.

B. Children and Heat
1. Water, Water, Water - you can't drink too much water.
   a) Children are more sensitive to heat injuries, heat stroke, and heat exhaustion than adults.
   b) keep them well-hydrated and do not rely upon thirst as an indicator.
   c) A well-hydrated child will urinate every 2-3 hours, and it should be clear.

2. Do not overdress them. Use loose woven fabrics and loose clothes, but keep them covered up to protect them from sunburn. A HAT PREVENTS SUNBURN AND HEAT INJURY.
3. Do the hardest walking and hiking in the coolest part of the day.
4. Do not give the child antihistamines. Will increase the risk of heat injury by decreasing the effectiveness of the sweating mechanism.

5. Watch overweight children closely
   a) Better insulated
   b) Find it harder to get rid of excess heat in their systems.
6. Sweat must evaporate to cool. Humidity slows down this process.
7. If a child becomes overheated, soak with water and fan to accelerate the rate of cooling.

C. Children and Sunshine:
1. Sunburn will cause permanent damage to a child's skin and significantly increase the risk of skin cancers.
2. Cover them up with proper clothing. Have them wear a wide-brim hat, and use sun blocks that are properly applied frequently.
3. Protect their eyes with sunglasses to prevent cataracts.
4. Do not apply sun block to babies hands because they usually end up in the child's mouth.

D. Children and Cold:
1. Children cool off faster than adults, and their response to hypothermia is poor.
2. Have them wear proper clothes appropriate for the weather and keep them dry, if they get wet, get them dry.
3. Treat the problem early before it becomes severe.
4. Never put a child to sleep if they are wet or damp or allow them to sleep in a damp sleeping bag.

E. Children and ouchies:
1. Properly clean wounds, even in the sobbing child.
2. Keep wounds clean and dry.
3. Watch wounds very closely for infection.

F. Children and Poisons.
1. DEET is not recommended because it is a proven neurotoxin that can potentially cause serious damage.
   a) There are other effective products that do not have the same risk.
   b) Always put insect repellents on the child's clothes, not on the child.
2. Know the poisonous substances in the area, carry syrup of ipecac and activated charcoal, and know how to use it if you suspect an oral poisoning.

3. For contact poisons such as poison ivy, wash the skin and clothes well. Treat with hydrocortisone creams and oral antihistamines such as Bendadryl (except in cases of exposure to extreme heat).

III. General Concerns:
A. Be prepared to take a break, take lots of breaks.
1. Little bodies tire easily.
2. Be careful not to push to hard.
3. Longer hikes or paddles require more breaks.

B. Treat the junior members of your party as full members of the group when and where you can safely do so.
1. Assign tasks and campsite chores just as you would any adult participant.
2. Important for them to feel their contribution is essential to the comfort and safety of the entire group.

C. Touching: Teaching certain outdoor pursuit skills requires a degree of touching.
1. When touching someone (child or adult), even for their own safety or instruction:

a. Always ask first.
b. Never touch against a persons will (Unless a clear and present danger exists to the person.)

2. Never touch a child in a place that is normally covered by a bathing suit.
   a. Unless for clear medical necessity
   b. And only then in the presence of another adult, same sex as the child if possible.

D. Listening to Kids:
1. Many times adults may give responses that put up barriers to communication, when a young person is communicating a serious problem, strong feeling, or a confused or hidden message.
   a. "Because I said so"
   b. "That's wrong, listen to me"
2. Our concern may be on solving a problem and moving on.

3. The child or teenager may feel the need to be heard and understood, with solving the problem as secondary in concern.
4. Try to focus on the person instead of the problem in these cases.
   a. Use a "door-opener" statement to encourage people to start or continue talking.
      1) "Tell me about it."
      2) "I'd like to hear more."

   b. Try to give this person your undivided attention.
      1) Focus all your attention on listening to the individual, not doing something else while you listen.
      2) Everyone enjoys that when they are tiring to communicate.

** This outline is intended only as a reference and starting point. The elements listed are not necessarily all inclusive. Interested parties are heavily encouraged to refer to the references for more complete information.

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AGE SPECIFIC EXPECTATIONS & SAFETY ISSUES

ADAPTED FROM BARBARA KENNEDY, M.D.

AGE	EXPECTATION	SAFETY ISSUES
0-2 YEARS	-DISTANCE TRAVELED DEPENDS ON ADULTS -CHILD CARRIER USED	-PROVIDE SAFE PLAY AREA(TENT, TARP, CANOE, ETC.)
2-4 YEARS	-DIFFICULT AGE -STOP EVERY 10-15 MIN -HIKE 1/2 - 2 MILES ON OWN	-DRESS IN BRIGHT COLORS -TEACH HOW TO USE WHISTLE: 3 BLOWS V. 2 BLOWS -IPECAC SYRUP
5-7 YEARS	-HIKE 1-3 HOURS/DAY -COVER 3-4 MILES OVER EASY TERRAIN -REST EVERY 30-45 MIN	-CONTINUE TO CARRY WHISTLE -CARRY OWN PACK WITH SMALL FIRST AID KIT AND WATER.
8-9 YEARS	-HIKE A FULL DAY WITH EASY PACE. -COVER 6-7 MILES OVER VARIABLE TERRAIN -IF TALLER THAN 4 FEET, CAN USE FRAMED PACK	-SAME AS 5-7 YEARS PLUS: -TEACH MAP USE AND ROUTE FINDING -PRECONDITION BY INCREASING MAX. DISTANCES BY LESS THAN OR EQUAL TO 10%/WEEK -WATCH FOR OVERUSE INJURIES. -KEEP WEIGHT OF PACK LESS THAN OR EQUAL TO 20% OF BODY WEIGHT
10-12 YEARS	-HIKE A FULL DAY AT MODERATE PACE -COVER 8-10 MILES OVER VARIABLE TERRAIN	-SAME AS 8-9 YEARS
TEENAGERS	-HIKE 8-12 MILES AT ADULT PACE -MAY SEE A DECREASE IN PACE OR DISTANCE DURING A GROWTH SPURT	-SAME AS FOR 8-9 YEARS

Defining Responsible Stewardship: A Land Management Perspective

by

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Abstract

The use of our nation's wildlands has grown steadily over the past few decades with an estimated 400% increase in recreational use since 1965. That increase in use has not only resulting in damage to the natural integrity of the land but to the recreational experience as well. This interactive workshop will focus on the environmental impact, user conflicts, and access issues related to natural areas. The scene is an open land managers meeting designed to hear concerns from the local community, recreational users, lawyers, and administrators in regard to a recent proposal that would limit recreational use at the Garrett Mountain Preserve, a hypothetical nature preserve located in New York State. Participants will be asked to portray a variety of characters during the meeting, followed by a brief discussion to identify the ethical issues and responsibilities we have as outdoor recreation and education administrators, instructors, student leaders and professionals.

AGENCY	AGENCY TOTAL ACREAGE
National Park Service	75,843,940
U.S. Forest Service	190,657,096
Bureau of Land Management	342,318,000
Fish & Wildlife Service	90,427,738
TOTAL PROTECTED ACREAGE	**699,246,774**

Federally Protected Lands in the United States.

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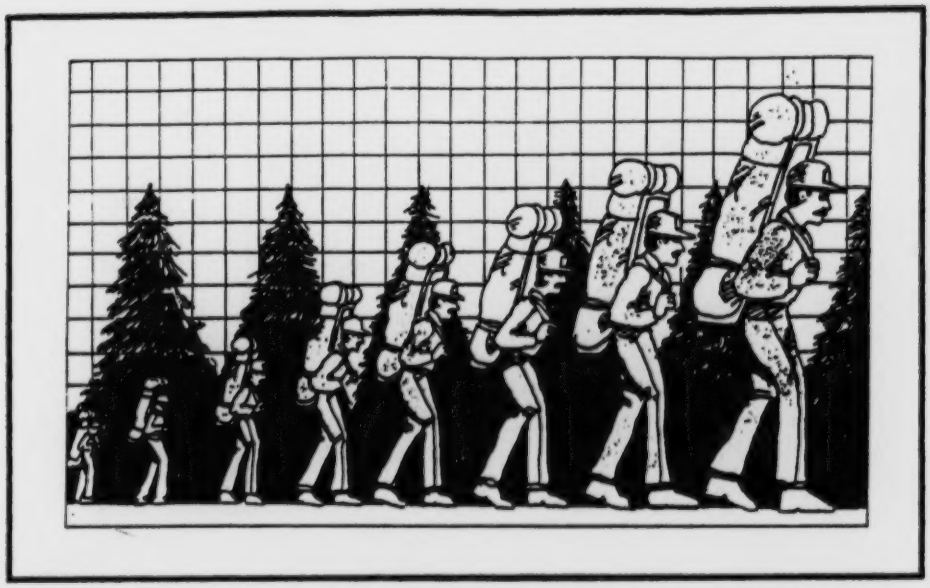

Since 1965, recreational use of our nation's wildlands has grown by nearly 400%, resulting in damage to the natural integrity of the land and the recreational experience. (Hampton, Cole p. 14)

Outline of Activity

Each person attending the presentation is given a wildcard and at least one index card with a character to play *(see appendix)* at the hypothetical, open meeting where the Garrett Mountain Preserve Land Stewardship Committee hopes to receive feedback on their recent proposal to limit all recreational use at the Garrett Mountain Preserve. The Preserve, protecting over 10,000 acres of pristine natural area and providing abundant recreational opportunities, is being threatened by increased user impact since it is located within a few hours of a thriving metropolis. It has been a recommendation by the Land Stewardship Committee that a management policy be developed to help reduce the increasing recreational impact by limiting access to all recreational users.

Here is a complete, but not exhaustive list of the characters...

- Local Climbing Guide
- Visiting Climber
- Mountain Biker
- Nature Photographer
- Preserve Ranger
- Local Restaurant Owner
- Local Outdoor Shop Owner
- Local Service Station Owner
- Garrett Mountain Executive Director
- Local Forester
- Local Climber
- Local Rescue Team Member
- Hiker
- Birdwatcher
- Local Neighbor
- Lawyer
- Local Deli Owner
- Board Member
- Insurance Representative
- Local Sierra Club Representative

Activity Goals and Objectives

The goal of the workshop is to help identify and generate a discussion on a variety of issues and topics related to outdoor recreation and land protection, and how we as users can become responsible stewards. It is helpful to divide people into three separate groups according to thier character *(recreational users, land managers and local community members)* and have them identify each of their concerns. Conclude the discussion by inviting people into a large group discussion to report on the issues and concerns of each group.

Topics to be confronted and discussed may include...

- land protection
- safety
- financial constraints
- recreational opportunities
- individual and community responsibility
- ethical concerns
- public relations
- legal and liability concerns
- local economy
- user conflicts
- bio-physical and social impacts
- educational responsibility

These topics can easily lead to further discussion on minimum impact techniques, land management theory, ethical consideration, law and public policy, recreational benefits and economics, fiscal management, conflict resolution and mediation.

Additional Resources and Works Cited

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Waterman, Laura and Guy. 1993. *Wilderness Ethics: Preserving the Spirit of Wildness*. Woodstock, Vermont: The Countryman Press.

Insurance Representative

Your firm insures the Garrett Mountain Preserve. It is your strong opinion that certain recreational uses should be abolished primarily from a risk management perspective. Both rock and ice climbing is of special concern, as is kayaking and hangliding due to there high risk status. These pursuits should not be allowed on Preserve property! If they remain, it is necessary for your firm to increase the Preserve's insurance premiums due to increased liability.

Local Neighbor

You and your family have lived in the Garrett Mountains for numerous generations and have enjoyed hiking on the property for as long as you can remember. You've also had the opportunity to meet some really wonderful people throughout the years and are delighted to see so many people enjoying the mountains you hold so dear to your heart. You would like to urge the Board of Directors to not impliment a strict user policy.

Horseback Rider

You find the Garrett Mountain Preserve perfect for afternoon riding. In your opinion, there is no better way of experiencing some of the more remote regions of the Preserve than on horseback. You hope that the Board of Directors recognizes horseback riding as a compatable use of the land. If the Preserve wants to limit recrational users, they should consider the radical mountain bikers who wear obnoxious neon clothing and ride much too fast! They have even spooked your horse on a number of occassions.

Visiting Climber

You have been thoroughly impressed by the climbing at the Preserve. As a West coast native, you have been equally surprized by the vast open space at the Preserve. In fact, it is quite contradictory to the over-developed, skyscraper images you previously had of the East coast. Your hope is that the Board of Directors and Preserve staff will find a way to protect the land while allowing recreational activities to continue.

Executive Director of the Garrett Mountain Preserve

As the Exectutive Director, you are in a very difficult position. Your main priority is to protect the natural integrity of the Garrett Mountain landscape while allowing people to experience its beauty through compatable recreational uses. Listen carefully to the comments and concerns. The future of the Preserve is theoretically "in your hands!"

Cross Country Skier

The many miles of carriage roads provide excellent cross country skiing opportunities in the coming winter months and you would hate to see that opportunity eliminated. They also offer wonderful mountain biking opportunities. Limiting recreational use would limit your opportunities and RIGHTS as a Preserve member. It is your hope that the Board of Directors does not limit recreational use at the Preserve.

Mountain Biker

The Preserve has some of the most awesome trails and carriage roads you have ever ridden on. Put bluntly, you are very agitated that the Preserve wants to take away, or even limit your RIGHT to ride on the property! If anything, they should get rid of some of those horseback riders because they take up so much room and you have to yield to them every time you encounter them on the property!

Local Outdoor Shop Owner

As the local outdoor shop owner, your business relies on the hundreds of people who come into town each weekend in search of quality recreational experiences. Limiting these experiences would limit your income. However, you agree that some restrictive management plan should be implimented because you recognize the impacts that are so prevalent at the Preserve.

Local Neighbor

You happen to live about one mile down the road from the main entrance to the Preserve. Quite frankly, you are sick of the city people coming to your area - parking their cars on your lawn, playing loud music, and wearing bright neon clothing and equipment! Just last weekend you caught somebody urinating on your prize bagonia garden!!! Parking is a very big concern for you because you are sick of people parking their vehicles on your front lawn.

Local Police Officer

You are the local traffic officer with a primary concern for the community's safety. People from the city come speeding into town and jeopardize the safety of other motorists and pedestrians. Parking along the Preserve boundries has also become an increasing problem in the last few years. You and the town feel strongly that the Preserve has the responsibility to increase parking availability and educate their users on safe driving.

Local Climbing Guide

As a local climbing guide, you are very concerned with the issues facing the Preserve today because they ultimately affect you. Your source of income is being threatened since climbing may be severely restricted or even banned entirely at the Preserve. You also feel that you are a valuable educational resource to the Garrett Mountain Preserve and hope that some alternative policies can be explored.

Hiker

Limiting the recreational use of the Preserve would obviously limit your recreational opportunities. You beleive that the social benefits of your pursuits should not be limited by a new management system. Although you do recognize that hikers have been identified as the Preserves largest user group and contribute to most of the bio-physical and social impacts.

Lawyer for the Garrett Mountain Preserve

As the lawyer for the Preserve, your primary concern is with liability. The increased popularity of outdoor adventure pursuits concerns you since recreational user statutes in your state may place the Preserve liable under certain circumstances since they charge a membership fee. Limiting the numbers of users, and possibly eliminating the more dangerous activities may be necessary to decrease the possibility of a lawsuit.

Executive Director of the Access Fund

The Access Fund is concerned with preserving America's diverse climbing resources. The crags at the Garrett Mountain Preserve happen to be a very valuable climbing resource. You hope to help the Preserve develop a management plan that will allow climbing to continue as a compatable recreational use of the Garrett Mountain Preserve. You also feel that education is a strong component in lessening climber impact.

Local Sierra Club Chapter Member

The preservation of the Garrett Mountain for future generations is you primary concern as a Sierra Club member. Recreational use is not the issue before the Board of Directors, but rather protecting the beauty and integrity of the of this biologically diverse region for future generations. Recreational use threatens the natural integrity of the Preserve! You are also upset that the Preserve's Consulting Forester recommends clear cutting certain areas along the carriage roads to enhance scenic views, further upsetting the natural intergrity of the land.

Local Neighbor

Increased recreational use over the past few years has led to traffic problems right in front of your home as a neighbor to the Preserve. Your primary concern is for your two small children who often play on the front lawn and are in danger of being hit by speeding traffic. Lessening the numbers of users lessens the likelihood of injury to your children. However, you are also a Preserve user and would hate to see your hiking limited.

Preserve Ranger

Your concern as one of the Preserve Rangers is simple - protect the natural integrity of the Garrett Mountain landscape while educating recreational users about responsible stewardship. However, within the last few years, your job has evolved more into a position of law enforcement and public safety. You feel that limiting the numbers of users could lessen the impact on the ecosystem. Although you do realize that limiting users may put your job in jeopardy due to less revenue.

Local Restaurant Owner

Your business relies on the people who flock to the Preserve each weekend. If the Garrett Mountain Preserve plans to limit the numbers of recreational users, then they plan on limiting the numbers of restaurant patrons at your establishment!

Local Hunter

Part of the Preserve's proposal is to eliminate hunting on the property. As a local hunter and having lived in the area for over 25 years, you are outraged! If you cannot hunt on Preserve property, you'll have to travel hundreds of miles north to where it is legal. Also, hunting should remain a compatable use since it helps regulate the whitetail deer population.

Local Service Station Owner

Limiting the number of recreationalists at the Preserve would reduce the numbers of people in need of gasoline and auto service. This reduction would put an obvious constraint on your business. Your livelihood depends on recreation, therefore you feel the Preserve should reconsider implimenting a policy to reduce numbers.

Volunteer Rescue Team Member

As the Chief Paramedic of the local rescue team, you have responded to many accidents at the Preserve that have been directly related to outdoor adventure pursuits. The increased numbers of users over the past 5 years is directly correlated to the number of rescues executed. The numbers of users need to be reduced to lessen the numbers of people being injured and people also need to be better educated and more responsible with their pursuits. However, you spend many of your days off recreating at the Preserve and limiting use would limit your own opportunities!

Lawyer

If liability is the primary concern for limiting the numbers of visitors at the Preserve, then the Board of Directors has little to worry about for two reasons - recreational user statutes offer protection to landowners who allow people to recreate on their land and secondly because there has never been a lawsuit taken to court where an individual injured themself while climbing or any other high risk sports. If the primary concern is an upset to the natural integrity of the land, then the user groups simply need to take more responsibility in reducing their impact.

Local Deli Owner

Your business depends on the revenue generated by the people who visit the Preserve, especially on weekends. Without that revenue, you would be forced to sell your little deli which is conveniently located less than a mile from the Preserve's main entrance. You do, however, feel that some new management policy should be implimented since the Preserve lands are being threatened by the increased numbers of recreational users.

Canoeist

You are a strong canoe activist and it is your hope that the Preserve identifies canoeing as a compatable use of the natural landscape. Your activity impacts the land very little since you focus your activity around water.

Local Climber

You've been climbing at the Garrett Mountain Preserve for over 25 years. You hate to see the trails being eroded and trampled by people, but you enjoy sharing outdoor experiences with old friends. It is your opinion that the Preserve needs to take a more pro-active role in educating the recreational community about minimun impact techniques, especially your fellow climbers.

Hiker

You have grown up living near the Garrett Mountains and hiked the trails and carriage roads there for more than 40 years. You have a 6 year old grandson who, on occassion, enjoys accompanying you on afternoon walks at the Preserve. In your opinion, there are too many people using the Preserve - so many that they are spoiling the sense of solitude that has embraced you since you were a child. You are certainly in favor of a more strict user policy.

Consulting Forester to the Garrett Mountain Preserve

As a forester, your primary concern is for the rare and delecate dwarf pitch pine community located on the Preserve, some of which are over 300 years old. This unique and beautiful tree has become threatened over the years because of increased recreational use! The Preserve must make the dwarf pitch pine a main priority! You are also outraged that the Preserve allows so many climbers to rappell off the trees located on the cliff faces - they leave awful rope abrasion burns on the bark of many trees!

University-Based Outdoor Adventure Program Director

Your adventure-based education program frequents the Preserve. Outdoor adventure pursuits provide wonderful opportunities for students to experience the natural world, and learn a few of life's lessons. Limiting the recreational opportunities would also limit your program. Although you do recognize that large user groups, such as yours, have been noted as one of the main sources of impact - both bio-physical and social!

Kayaker

You are the President of the local kayak club and feel that your activity should not be limited at the Garrett Mountain Preserve. You are representing the entire kayaking community, all of whom feel the same as you do about the issue of limiting recreational use.

Visiting Hunter

Hunting is a necessary activity to help reduce certain populations of animals since most of the natural predators have been eliminated due to increased human use. Hunting must remain a legal and compatable use! Besides, it's your constitutional RIGHT to hunt!

Nature Photographer

The Garrett Mountain Preserve provides wonderful photographic opportunities with the diverse forests, crags of ancient beauty, unique wetlands, pristine mountain lakes and spectacular waterfalls. Overuse of the area is threatening these characteristics and your livlihood as a nature photographer. You would like to urge the Preserve to reduce the user numbers in any way possible.

Wildcard

State your own opinion.

Birdwatcher

The pristine Garrett Mountain environment provides a unique habitat for a large variety of migrant songbirds as well as larger predatory birds. It has even been noted that the Northern Raven, a skittish and rare bird in this region, has nested on the steep cliffs within the Preserve boundries! With so many people frequenting the Preserve, and especially on the cliff faces, you are concerned with recreationalists upsetting bird habitat. A more strict user policy must be installed to protect this valuable habitat. Although you do enjoy climbing and biking on the weekends.

Wildcard

State your own opinion.

Wildcard

State your own opinion.

Wildcard

State your own opinion.

Wildcard
State your own opinion.

Board of Directors
Land Stewardship Committee
Listen carefully to the comments and concerns of the participants and ask questions as you feel necessary. Ultimately, the management policy decision is your responsibility.

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An Examination of Negligence, Assumption of Risk, and Risk Management in Outdoor Recreation

By

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Abstract

Negligence litigation is an ever present concern of the outdoor recreation provider. This paper examines the elements of negligence, including the presence of duty, breach of duty, proximate cause, and actual damage. The use of assumption of risk as a legal defense and the components of a risk management program are also discussed.

Introduction

Outdoor recreation and education professionals expose their students or clients to risks on a common basis. The nature of most activities involved will provide some degree of inherent danger. In fact, many times risk is seen as a motivator to participate in a particular recreative activity. However, the old adage "play at your own risk" is at best only partially applicable. The public has the legal right to expect that the recreation activity they select will be provided in a well planned, safe environment (Gold, 1994).

The litigious nature of our society reflects the need for outdoor recreation and education professionals to be cognisant of issues involving legal liability, negligence, and risk management. A through knowledge of these topics and how they apply to particular areas of outdoor recreation will allow for a safer, reduced risk environment, fulfilling the participants desire to experience a risk activity.

Negligence is a common topic among providers of outdoor recreation and education. The fear of litigation, along with the possibility of staggering financial losses to the individual or organization is a valid concern in today's marketplace. In the past, if an individual was injured, it was blamed on a lack of personal skill or merely as an unfortunate accident. In most cases the person accepted responsibility for his or her own injuries. This has changed. As participation in risk activities continues to increase, there is the possibility for an increase in accidents and injuries. Persons who are injured today are less likely to accept personal responsibility. These individuals many times consider themselves to be victims. Improper teaching techniques, damaged or improper equipment selection and usage, unsuitable facilities, poor supervision, and failure to warn of the risks involved in an activity are all examples of accusations brought against recreation providers.

How can an organization or individual protect against being the target of negligence litigation? The foundation of this answer lies in being familiar with the legal concept of negligence. It is critical to take note that a basic understanding of various legal concepts in no way qualifies an individual to make important decisions regarding negligence issues facing an organization. Soliciting the advice of legal counsel is paramount in all legal matters.

Negligence is the failure to act as a reasonable and prudent person would act under similar circumstances. Negligent behavior can also be the omission of an act that a reasonable and prudent person would have performed. Negligent conduct has also been defined as behavior which falls below the standards established by law which provide for the protection of others against unreasonable harm (Clement, 1988). For example, in a recent Illinois case, the defendant was charged with not warning that an area was unsafe for swimming and not providing appropriate supervision for such a dangerous area (Hoye v. Illinois Power Company, 1998).

There are four elements that must be present in order to prove that a person has acted in a negligent manner. The first is a legal duty of care. The outdoor recreation professional has a legal duty to provide individuals with an activity environment that is as safe as possible. This does not mean that all risks must be eliminated from the program. However, it does mean that only the inherent risks of the activity remain, not extraneous dangers. For example, in a recent California case (Morgan v. FUJI Country USA, Inc., 1999) a person was injured after being struck in the head by a golf ball hit from an adjacent teeing area. Morgan, the plaintiff, may have assumed the risk of being struck by a golf ball while playing golf. However, Morgan's claim stated that the golf course, by removing a tree, had failed to perform its legal duty to provide a safe environment, and was therefore liable for his injuries. The court system has universally agreed that a determination of negligent conduct is made by comparing the actor's actions against the conduct of a hypothetical ordinary, reasonable, and prudent person under similar circumstances (Kaiser, 1996). In this particular case, the legal question was whether or not the country club management acted as other golf course management personnel would have acted under like circumstances. In practically all cases, the recreation provider will owe a legal duty or standard of care to his or her students or clients.

If it is established that a person or organization owes a duty to an individual, the second element of negligence is examined. This element is a breach of the legal duty that was present. It must be shown that an action or omission of an act breached the legal duty owed to the injured party. In a Wisconsin case, a snowmobile club and snowmobile trail grooming organization were accused of breaching their legal duty to properly maintain and mark the trail system used by recreational riders (Smith v. Eno Eagles Snowmobile Club, Inc, 1996).

The third element of negligence that must be present is proximate cause. This means that the direct action or inaction of the recreational professional was the cause of the accident and subsequent injury. Stated differently, would the injury or accident still have occurred despite any negligent act? Proximate cause is determined by examining whether or not the injury sustained should have been reasonably foreseeable to the recreation provider (Clement, 1988).

The final element of negligence is actual damage. In order for a person to be considered negligent, an injury must have occurred as a result of the breach of the legal duty. This injury must be severe enough in nature as to render the person incapacitated in some manner (Clement, 1988). This point is sometimes an issue of fact that requires the jury to make a decision. These four items: Presence of a duty, breach of duty, proximate cause, and actual damage must all be present if a person or organization is to be considered negligent.

The relationship between the property owner and the user must also be considered when determining the standard of care owed to a person pursuing a recreational activity. Those persons or organizations who are in possession of recreational land can be held liable for injuries occurring on that property. There are generally three classifications of persons who enter

property for the sake of pursuing a recreational activity, with each classification requiring an appropriate standard of care from the landowner. The first classification is the invitee. The recreational landowner owes the highest standard of care to this group. An invitee is a person who has been expressly or implicitly invited onto the land, for most commonly, economic benefit to the land possessor (Clement, 1988). However, is some cases, the economic motive does not have to exist for the invitee relationship to occur. The public, at large, is deemed to be an invitee on the majority of recreation use lands. If a person is considered to be an invitee, the landowner must maintain the recreational property in a safe manner and provide both verbal and written notice of any artificial or natural hazard that may exist.

The second type of relationship that can exist between a landowner and recreational user is termed a licensee. A licensee is an individual who has received permission to enter onto the land for recreational purposes, however, there is no economic benefit sought by the land possessor. For example, a person , with permission, enters onto private land for the purpose of fishing on a farm pond. Even if the landowner has not given permission to the individual, but allows the activity to continue, the licensee relationship is established. The major difference between the invitee and the licensee is that with the licensee, the possessor of the land must warn of only the dangers that are known to him or her. An invitee would require a more through inspection of the premises to be certain that all possible risks had been made known to the user.

The final classification requiring a standard of care is that of the trespasser. A trespasser is an individual who enters onto private property without permission from the landowner. An important concept to remember with trespassers is that the landowner must not be aware of their presence. For example, if a person entered onto private property for the purpose of hunting, and the landowner was aware and made no attempts to stop the activity (no trespassing signs or verbally asking the person to leave the property) the person would be considered a licensee. The property owner can not create an unexpected hazard that could result in injury to the trespasser. If a person is indeed considered to be a trespasser, the property owner owes no standard of care to that individual, with the exception of the created hazard (Briney v. Illinois Central Railroad Co., 1948). The issue of age is once again critical when examining trespassers. If the condition of the land presents an attraction to minors, the landowner will be legally responsible for taking measures to protect the minors from injury. The possessor of the land is said to be liable under the laws of attractive nuisance. The following example will illustrate attractive nuisance and how it may be applied.

In a wrongful death case in Illinois, a six-year-old girl drowned in her neighbor's above ground swimming pool (Henson v. Ziegler, 1995). The pool had an aluminum ladder which could be raised and lowered for access. On the night in question, the defendant forgot to put the ladder in the "up" position and as a result, the girl accessed the pool early the next morning and subsequently drowned. The defendants stated that the pool should be considered an obvious danger such as a lake or river, therefore no duty was owed to those who gain entry through trespassing. It was decided in the case that a pool is not an obvious danger to a six-year-old child. In fact, parents encourage children to enter swimming pools where they would not be encouraging towards other bodies of water. In this particular case, the original decision in favor of the defendant was reversed and remanded for further proceedings.

The outdoor recreation professional has some options for defense when named in a negligence suit. One of the defenses that is many times used in outdoor recreation litigation is that of assumption of risk. When a person chooses to swim in a lake, rappel from a rock cliff, jump from a bungee tower, or simply sit in a swing on the local playground there are inherent risks that are

present. The outdoor recreation provider must not assume the visitors who enter an area of their own free will assume the risks of that particular area (Jubenville, 1993). The defense of assumption of risk can be used only when the participants: Know the risk exists, understand and appreciate the nature of the risk, and freely choose to incur that particular risk (Clement, 1988). It is important to consider the age and experience levels of the participants in determining their ability to comprehend the risks involved in a recreational activity. Children must be held to a higher standard of care than a person of majority age.

Keeton (1984) examined assumption of risk from three perspectives. The aspect most used in recreation litigation is express consent. This is when the plaintiff, in advance of the activity, has given consent to remove any liability from the recreation provider, and has agreed to take the chances of incurring an injury from the known risks of that particular activity. It is a common practice of outdoor recreation providers to require that participants agree in writing to assume all the risks of an activity and thereby release the organization or individual from liability (Kaiser, 1986). These written documents take on many different names and appearances. Waivers, release forms, permission slips, and parental consent forms are the most common mentioned. From a legal standpoint, a release is a voluntary relinquishment of a claim, right or privilege by an individual to someone against whom it might be enforced (66 Am.Jur.2d, Releases 1). These documents have been ridiculed by many as "not being worth the paper they are printed on." This argument is based on the fact that a person can not be legally released from a negligent act he or she committed, regardless of signed documents. Many outdoor recreation providers are incorrect in assuming that when a person signs a waiver or release for it removes all liability from the organization. For example, a recreational softball league requires all participants to sign a release form before the first game of the season. Midway through the schedule, a player is injured because of a surveyor's stake that had been placed in left field. The softball organization will most likely be unsuccessful in attempting to use the assumption of risk defense in this case. In this example, the reasonable and prudent field supervisor would have inspected the playing area for possible hazards before the initiation of play. When signing the release, the player was only agreeing to accept those risks that are an inherent part of the game.

The waiver or release form is not however an item that should be deemed useless. These documents can be very productive in the event of litigation because they may indicate that an injured party was, at the very minimum, aware of the risks that were associated with that particular activity. The wording of this document is critical if it is to be useful when implemented as a defense. Initially, the name of the document needs to be changed. Since negligent conduct can not be waived or released, these terms serve no purpose but that of confusion to the injured party, or perhaps a prospective jury. A common term used today is the agreement to participate. The agreement to participate must be worded very explicitly, with no confusion regarding any terminology. Any activities that students or clients will be participating in must be explained in detail, along with the injuries that can occur through participation. Any safety rules that are to be followed must be listed and explained, as well as any emergency procedure plans that have been formulated (Clement, 1988). After the agreement to participate is signed by the participant it should be filed in the event litigation should arise in the future. It is important that the agreement to participate be examined by an attorney prior to implementation by the recreational organization.

It is evident that outdoor recreation and education professionals must be prepared to deal with risks. The nature of the risks will depend upon the type of activities that are offered. The process of identifying potential risks and implementing strategies to reduce the likelihood of those risks causing personal injury is called risk management. The size and type of the

organization will determine the most suitable risk management strategy. Some facilities may have outside consultants evaluate their programs, where others may assign this duty to an on-site administrator. Regardless of the method, the goal is the same. Risk management programs are designed to reduce the frequency and severity of injuries, as well as reduce the chances of undue financial burdens being placed on the organization as a result of litigation.

The first step when implementing a risk management program is to identify the risks. A comprehensive examination of all aspects of the recreation program must be conducted in order to identify all possible dangers. For example, do safety inspections of the facility and equipment used in the activity take place at regular intervals? Is this information documented? How are repair requests make and prioritized? Are participation waivers or agreements to participate properly worded and implemented? Questions such as these will aid the program administrator in locating potential liability risks in the organization.

Once these risks are identified, they must be evaluated according to frequency and severity. Each risk is examined with regard to how many times (frequency) an injury is likely to occur in that particular risk area. Severity refers to the degree of injury that is usually suffered in the event of an accident in that particular risk area. For example, examine the frequency and severity of playground injuries versus swimming pool injuries (Kaiser, 1986). There are many more injuries that occur on a playground when compared to a pool, however, the extent of these injuries is rarely critical. Therefore, playgrounds have a high frequency for accidents, but a low severity level. In comparison, swimming pools will have fewer accidents (lower frequency), but the severity of the injuries (drowning) is extreme. A similar analysis of each risk area should be completed.

Once each risk is evaluated, the recreation administrator must make decisions regarding each activity. According to Kaiser (1986), there are three general options available to the risk manager. The first of these is risk avoidance. It is generally agreed upon that this is not an acceptable practice in the area of recreation (Van der Smissen, 1979). The removal of an activity will however eliminate the possibility of injury and financial loss. The decline of trampolines in recreation programs and the removal of diving boards are examples of the legal liability outweighing the perceived benefits of these pieces of equipment.

The second option available to the risk manager is that of risk acceptance and reduction. Risk acceptance involves the organization having the knowledge that a risk exists and with that knowledge, assuming the risks that are associated with a particular activity. This coupled with risk reduction is a viable alternative for the outdoor recreation provider. Risk reduction includes active involvement on the part of all personnel in identifying and taking necessary steps to reduce both the frequency and severity of injuries that may occur. The strategy of implementing risk acceptance and reduction would be desirable in situations where the potential risk frequency is low to moderate and the severity of the risk area is low.
Activities that involve the potential for catastrophic injury should be placed into the third category.

With these high risk activities, the recreation provider should examine the possibilities of transferring the risk to an outside agency. In most cases, this entails the purchase of insurance. Insurance is the keystone of most risk management programs (Kaiser, 1986). There are a multitude of insurance selections available to the outdoor recreation provider. Determining which policy is best suited to a particular organization can be a laborious and confusing task. It is recommended that an insurance provider be consulted with regards to individual needs.

The final stage of the risk management program involves continuous evaluation and updating of the program. The recreation provider must remain current on not only new advances in equipment and teaching techniques, but also changes that occur in the local and state legislation regarding negligence.

The popularity of outdoor recreational pursuits is increasing on an annual basis. Persons are willing to spend larger sums of money to participate in risk taking experiences. It is the duty of the recreation professional to provide an environment where extraneous risks have been reduced or eliminated. By taking a proactive approach to risk management, both the provider and user will benefit.

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Future Directions for AORE

& 1995 AORE Membership Survey Results

By Jim Fullerton, Tim Moore, and Steve Guthrie

(Members of the AORE Board of Directors)

ABSTRACT---Since the Association of Outdoor Recreation and Education (AORE) just completed its second year of existence, it seemed appropriate to revisit the purposes and directions for the association in a roundtable format. Discussion topics that emerged at this session included networking with other programs, access to public lands, certification, accreditation, and benefits of belonging to AORE compared to other organizations.

Perhaps the most significant result from this session was the 1995 AORE membership survey, which was distributed to session attendees and other AORE members at the conference. This data will be used by the AORE Board of Directors to update and augment the priorities voted upon when the association was formed at the 1993 ICORE at Oregon State University. In 1993 the top five priorities were 1) communication and networking, 2) liability and safety issues, 3) land use and access, 4) environmental practices / issues, and 5) developing an operational framework for the association. It is interesting to note that the top four items remained the same from 1993 to 1995.

The results of the 1995 AORE membership survey follow.

1995 AORF Membership Survey Results

Conducted at the 1995 ICORE at Cornell University, New York N = 36

What type of program are you representing at the ICORE?

College or University outdoor recreation or education academic program	9	25.0%
College or University outdoor recreation program	18	50.0%
Secondary education outdoor program	2	5.6%
Community outdoor program	0	0.0%
Military outdoor program	5	13.8%
Non-Profit School	1	2.8%
Outfitter or Guide	1	2.8%
Other?	0	0.0%
	36	100.0%

What state/province/country do you work or study in?

Alberta, Canada	1	Iowa	1	North Carolina	2
California	4	Maine	2	Ohio	1
Colorado	1	Montana	2	Texas	3
Florida	1	Nebraska	1	Utah	2
Georgia	1	New Hampshire	1	Vermont	1
Idaho	1	New Jersey	1	Virginia	1
Illinois	5	New York	1		

What is your title or position?

Director or Asst Director of Outdoor Recreation	17	47.2%
Professor or Assistant Professor	5	13.8%
Manager or Assistant Manager	3	8.3%
Coordinator	2	5.6%
Administrative Assistant	2	5.6%
Teacher of Wilderness Skills	1	2.8%
Owner/Operator	1	2.8%
Student Manager	1	2.8%
No Data	4	11.1%
	36	100.0%

How long have you been an AORE member?

Just joined	8	22.2%
1 year	2	5.6%
2 years	22	61.1%
No Data	4	11.1%
	36	100.0%

Do you feel that your membership dues are appropriate for the benefits you receive?

Yes	22	61.1%
No	2	5.6%
No Data	12	33.3%
	36	99.9%

Comments:

ORCA discounts (6)
It's cheap (3)
Don't know (3)
OK, but need more benefits and increase costs (2)
Did not get ORCA benefits (2)
OK
Not paying enough
OK, primarily a member because I believe in it

Does the Association newsletter keep you informed on Association issues?

Yes	23	63.9%
No	0	0.0%
Have not received yet	7	19.4%
No Data	6	16.7%
	36	100.0%

Comments:

Not much going on (2)
Need consistency
General info is good, especially considering its volunteers
More practical management and tips on technology

How could the Association newsletter better serve your needs?

- Add job listings (6)
- e-mail newsletter to members (3)
- e-mail list
- Expand
- Provide current information
- The main vehicle for information
- Make better known how members can be involved
- Inform members about events outside AORE
- Other college programs
- More articles
- Cooperative trips
- Surveys
- Better focus
- Focus on secondary education
- Publication schedule
- Doing good job
- Equipment sales
- More frequent
- Publication Reviews
- Outdoor Network (3)
- Good network vehicle
- More regular schedule
- Proceedings
- Get information from members

What other types of publications and information would be useful to you?

- Journal (8)
- Job listings (3)
- Electronic network (2)
- Proceedings (2)
- Program Information (2)
- Directory of programs and people (2)
- Common practices (2)
- Networking (2)
- Outdoor Retailer
- Programing guide
- Trends and issues

Have you used the information provided in your AORE/ORCA membership confirmation packet?

	Yes	No	Have not received
Membership Directory	15	3	7
Board of Directors list	13	6	6
AORE bylaws	15	5	6

Does the ICORE serve your needs?

Well organized
Reenergizing
Yes, in some areas
Yes, information good (3)
Good for networking, professional development (3)
Yes, especially when connected with AORE
Yes, liked tent city, networking
Yes, a must! (6)
More equipment manufacturers
Good presentations
Good education/information(2)
Learning experience
Roundtables
Proceedings
Please video tape sessions
Need more involvement
Networking (3)
Yes (9)
No, it does not move forward

Please document your use of ORCA benefits?

	Have used	Have not used	Did not know about	Will use in future
Leave No Trace Mobile	21	3	2	3
State of the Industry Report	19	7	3	3
ORCA Newsflash	18	8	4	2
Legislative Updates	17	7	3	4
National Summit Update	16	9	4	1
Outdoor Programmer's Resource Guide	15	6	4	4
ORCA Subgroup Update	10	11	5	2
Fed Ex discounts	3	21	5	2
Hertz car rental discounts	1	19	4	5
Choice Hotel discounts	1	20	4	5
Sprint Long distance phone discounts	0	19	4	1
Yellow freight discount	0	23	4	2
United Van Lines discounts	0	22	4	0

1995 AORE issues identified by those surveyed
(respondents could check up to 5 issues)

Communication/networking	36	Job Placement	6
Liability and Safety Issues	22	AORE Operational Framework	6
Land Use and Access Issues	21	Research	5
Environmental Practices	15	Student Involvement/ Scholarships	5
Professional Development	11	Outreach and Marketing	4
Certification & accreditation	10	Journal	2
Equipment purchasing database	8	Diversity	1
		Gifts and grants	0

Thanks to all who participated in this survey!

Is Cheese Food Really Food? a.k.a. Some Conscious Alternatives to Overprocessing Experience (a working paper)

by

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Abstract

The increasing emphasis on teacher-directed processing of adventure experience may be denoising both experience and the value of self-reliance in students. This paper provides an overview of different teaching models used in adventure education programs, different philosophical perspectives, and a model for promoting student centered learning. The goal of this paper is to encourage teachers of adventure education to make conscious choices about the methods they use. The model presents methods to promote self-reliance in students.

Introduction

The idea for this paper had its origins in a conversation about teaching methods. The methods in question were those where the teacher was the authority with little room for choice or input on the part of the students. While these methods have merit according to some views of "good education," it became clear that certain values which we hold in common; such as self-reliance for students -- were not a part of this methodology. Our perception was that some of the same problems which were evident in these non-experienced based classrooms were evident in the experienced-based outdoor education programs that we teach as well.

The first question we faced was this: Do we want self-reliant students? If we define the self-reliant individual as one who can identify their needs, share those needs, and take responsible action to get those needs met, then the answer is an unequivocal "Yes." If our students are to survive in the rapidly changing, information rich, world of today then self reliance and life long learning skills would seem critical. If we want to promote the value of self-reliance in our students we must use methods that promote this value in our teaching.

We perceive that there is an overemphasis on teacher-directed processing

of experience in adventure programs today. We have chosen to call this over-processing. Over-processed experience has at its origins a desire to make an experience "mean something", that is to transfer meaning from the experience to life outside of the experiential arena. We agree that this transfer of learning is important. How it should happen is the question. When the teacher, and not the student, is directing the process of deciding what the experience means to the students, a problem arises. The problem is that when the teacher is directive during discussion, he or she has taken on the responsibility for deciding what was to be learned. This denies the value of self-reliance because students are not making choices about how they should organize meaning from their experiences. A second problem is the high value placed on discussion (intellectualizing about the experience). In some part, the intellectualizing can become more important than the experience itself. If this happens, is it still experiential education? For [illegible] this is true, as teachers, make conscious choices about our roles as educators to promote the value self-reliance and life long learning for our students in adventure education programs? This question is at the heart of this paper and the intent of a model which we have designed in an attempt to illuminate this process. In the context of this discussion, let us acknowledge that the ideas we are discussing are not new; we did not create them. They are firmly founded in existing educational methodology and already in practice in many student centered classrooms. We are merely organizing some of these thoughts in a new way in hopes of stimulating conversation, and encouraging both ourselves and some of you to make more conscious choices about our teaching methodologies.

To facilitate this discussion about making conscious choices we will first review models of instruction from Outward Bound, Project Adventure, and the National Outdoor Leadership School. A brief synopsis of several philosophical positions will provide some insights into differing relations placed on the intellectual and the experiential. Lastly, we will explore our model and discuss some roles the student and teacher may take on to promote self-reliance in the experiential learning process. Conscious choice of these roles could help one avoid the pitfall of overprocessing experience. Implications of this model for short and long programs will be discussed.

So to the question of "Is Chance Post really fresh?", you will have to examine our ideas, read up, and decide that for yourself. Our hope is that you think about this issue and put your decisions into practice through the numerous choices that you make when each teaching students.

Teaching Models Used in Adventure Education Programs

We have selected several models to provide an overview of what is being done, each of it very well. Please note that we are speaking in generalities, as is true in any adventure[illegible] program, teaching methods will vary greatly from instructor to instructor and course to course. As mentioned earlier, we are not out to re-invent the wheel, but are struggling to promote discussion about teaching methods that will promote self-reliance. Diane Dance (1987) provides an overview of three models used in the past and presents at Outward Bound, School, Hurely, and Redcliffe blames the Adventure Based Counseling (ABC) method that Project Adventure uses with youth in counseling situations. The National Outdoor Leadership School is another well known provider of outdoor adventure programs. While this is not a list of all programs, we hope that it is somewhat inclusive of current models of practice. Brief descriptions of each of these methods are presented along with some of pluses and minuses of each.

Dance (1987) describes two models, the "Bouncing Ball for Problems"

(ADT) and the "Outward Bound Plus" (OBP) that are currently being used. He then presents his "Metaphor Model" (MM) and describes how it can be implemented and why it can maximize the impact of an Outward Bound course.

The Executive Board for Themselves (EBT) model includes the most basic elements of an Outward Bound course, such as it was imported from Britain in the 1960's. An instructor using this method presents incremental experiences leading up to mastery and peak experiences. The course itself is relied on to do the teaching and discussion and feedback are de-emphasized. The experience is of primary value. The plus of this teaching method is the degree of success this model has been found to provide "typical" Outward Bound course outcomes such as peak experiences, increased self-confidence, and increased sense of interdependence of humanity, for both standard and special population courses (Bacon, 1987). A second plus is that instructors do not require specialized training in counseling, therapy, and human relations; they can rely on their skills of leading groups through increasingly difficult challenges in the backcountry. Three criticisms have been leveled at the EBT model (Bacon, 1987). First, is that proponents of John Dewey's philosophy of learning argue that students need an opportunity to reflect on experience so they can organize what they have learned in order to apply it to other life situations. Second, that staff should be trained in the specific cases and needs of special populations so they can be more effective, and third, that the outcomes of increased confidence and peak experiences may not lead to any actual behavior change.

The Outward Bound Plus (OBP) model attempts to provide an answer to some of these criticisms. In this model, the standard Outward Bound course continues, but now the instructor provides debriefings and some psychotherapeutic techniques to help students understand and transfer what was learned from the experience. The instructors role now includes discussion leader, counselor, and group process facilitator. The instructor focuses on making cognitive links between course experiences and daily life as he or she assists students in their attempts to integrate what they have learned from experience into their daily lives. The plus of the OBP model is that it addresses many of the criticisms leveled at the EBT model which promoted (1. that typical Outward Bound type outcomes continue to be achieved (Bacon, 1987). Additionally, it was discovered that the Outward Bound course provides fertile ground for the effective practice of non-Outward Bound methodologies in counseling and therapy, such as the treatment of individuals with problems using the methods of Ecological Acceptance (Bacon, 1987). Criticisms of OBP include that it is ineffective; its dependence on imported programs, practitioners, and services would apply in the case of the importation of the Outward Bound experience itself. Experience is sometimes seen as less important than the discussion (Bacon, 1987). Bacon raises a good question: is OBP experiential education if discussion seems such a prominent practice?

The Metaphor model (MM) represents Bacon's efforts to address these concerns. He builds on what was learned from the EBT and OBP models, and suggests consciously forging course events so that they become experiential metaphors for actual changes in students lives. The process of the MM include that it preserves gains made by the OBP model in specificity and transferability while re-asserting the primacy of experience. The metaphor serves to create an experience where the students are conscious of the issues they are working on during the experience. The transfer of learning are becomes part of the experience (Bacon, 1987). He see one primary drawback to this model. Bacon asserts that the "ethical and effective deployment requires a complete and accurate assessment [of students needs]" (p. 14). The problem that he see with this is that it is often difficult, if not impossible, to get

a complete and accurate assessment of needs. As a result, the instructor will be designing metaphors based on what he or she thinks the students need. The instructor is responsible for deciding what they need, and what is the best way to meet these needs. To our view, this puts a heavy responsibility on the instructor, and at the same time, denies the value of students making their own choices, and thus promoting their self reliance.

Project Adventure promotes the use of a model called Adventure Based Counseling (ABC), (Schoel, Prouty, and Radcliffe), which is very similar to the Outward Bound Plus model. The same criticisms leveled at Outward Bound Plus can apply here. ABC describes each activity as a "wave" containing a brief (introduction), activity (the experience), and a debrief (the discussion). Each debrief contains questions to help students transfer learning through a three step process: What?, So What?, and Now What?. The "What" asks students to reflect on what occurred. The "So What" asks students to determine what these occurrences mean to them as individuals and as a group. The "Now What?" encourages students to articulate how what they have learned can be useful to them in life outside of the experiential classroom. A plus to the ABC model is that it describes a clear process to help students transfer learning from the experience to real life situations. A criticism is the high value placed on discussion in this model. Experience without the discussion is not seen to hold much value. The ABC and OBP models raise several questions: Is this experiential education if the value of the discussion is primary?; If the instructor directs the content of the debrief, as some do, who decides what was learned and how it should be used, the instructor or the students?

The primary aim of the National Outdoor Leadership School(NOLS) is to provide students with a variety of skills needed to participate in expeditions. In this skills-based curriculum learning is appropriately directed by the instructor. The instructional methods most closely resemble that of the MST model where the instructor teaches skills and provides incremental challenges aimed at preparing the group to achieve a goal, such as climbing a mountain. Group processing would likely be specifically addressed when the topic of expedition behavior is taught. Pluses of this teaching methods are that NOLS can accomplish its primary program aim (teaching skills) very effectively through instructor directed learning. A criticism is similar to that of the MST approach -- that there is likely to be limited transference of learning to life outside of the course.

All of these methods are currently being used by outdoor educators. We present these models, not so much to judge them, but to encourage the instructor to make conscious choices about which style to use when.

Selected Philosophical Positions

It is beyond the scope of this paper to present detailed information about philosophical positions, but we would like to mention several ideas which we used as tools in making decisions for the model.

The first point the emphasis placed on the importance of intellectualizing the adventure experience through leader directed discussion. One obvious answer is that the instructor believes that discussing the experience will lead to increased chance of transfer of learning to life arenas beyond the experience. This is probably true. But is the experience itself seen to hold value without the discussion? According to Austin (1991) "Roland, Keene, Dubois and Lenitin, Roland, Summers, Friedman, Barton and McCarthy, Smith and Witman have all stressed the critical nature of debriefing, or group processing, in order for clients to achieve benefit from adventure/challenge therapy" (p. 81). If a good adventure program is one that

consists of equal value on experience and discussion, what then of the program that has little of no discussion? Does it hold little value? This dilemma is at the heart of the MST versus OBP debate.

Western educational thought has developed with a distinction between the knowing mind (the intellectual) and the knowing mind (that which can be sensed), with a distinct valuation of the intellectual over the physical (Crosby, 1995). While some philosophers resolved this mind/body split in theory (Kant and Dewey and others), education, in practice, has not.

One example is my daughter's first grade public school curriculum. When reviewing the goals set out for her first grade year I note goals in areas such language, reading, and math. When I look at the curriculum there are also classes in physical education, art, and music (taken once or twice a week). I conclude these classes must be "extra-curricular", or beyond curricular interest, because they are not included in her goals for the year. The emphasis on the primacy of intellectual development is by no means unique. It pervades our educational systems from the earliest age, and continues through college. Our educational system values the development of the intellect more highly than the physical.

Theories of education are based in more general theories about epistemology, which is "the study of how we know what we know" (Crosby, p. 74). One way of knowing is that of authority; "the teacher has the knowledge and dispenses it to students in the way he or she feels best" (Estes & Mechikoff, 1995, p. 69). Authority in education is obvious, so much so that we may take it for granted. All students have at one time or another experienced this teaching method (Estes & Mechikoff, 1995). This method of knowing values the intellectual, and positions the teacher as the holder of intellectual knowledge which they will "pour" into the students who are "empty vessels."

A second epistemological theory, which Estes and Mechikoff call "subjectivism" contends that individuals have experiences that are observable by that individual, and the individuals come to know those things which they have experienced. In other words, we know something because we experienced it. Epistemologies that emphasize knowing through subjective experience include existentialism, phenomenology, Zen Buddhism, and other Eastern philosophies (Estes & Mechikoff, 1995). Knowing through subjective experience does not acknowledge a need for intellectualizing experience. You may recognize this as the epistemological position of the MST model -- the experience speaks for itself. John Dewey wished to resolve the problems created by dualism. According to Hunt (1995) "Dewey wants empirical naturalism to render the old philosophical dualisms obsolete, rather than refute them directly. He simply abandons these terms and approaches philosophy from a new perspective; the perspective of experience" (p. 82). Dewey saw experience as the basis for his philosophical method, and he distinguished between two different, but interconnected parts: the primary and secondary parts of all experience (Hunt, 1995). Primary experience refers to the immediate, tangible, moving world which one experiences, and secondary experience is what happens after the primary experience. This "reflective" experience takes the data provided by the primary experience and arranges it. Thus Dewey avoids dualism, and also explains how one can transfer learning from an experience to other life arenas.

Kraft summarizes several key aspects of Dewey's thoughts: "Individual learner involvement in what is to be learned; learning through experiences inside and outside the classroom, and not just from teachers; and, learning through experiences immediately relevant to the learner" (p. 12). While this discourse scratches only the surface of Dewey's thinking, it provides a rationale for stating that students can select ways to effectively organize their experience, and that teachers need to promote the student's role in the

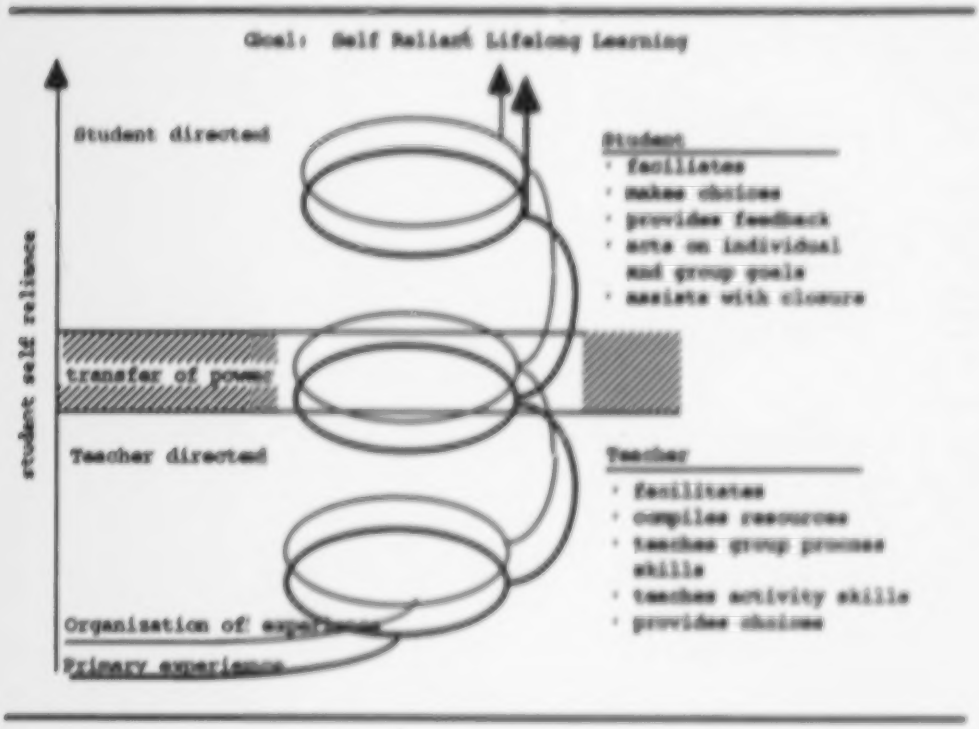
learning process by allowing them involvement in what is to be learned. The teacher can facilitate learning by using methods to encourage student involvement in secondary experience including: (1) listening for students needs to process experience; (2) providing resources that can be used by the students (such as journal or books of readings); (3) choosing more creative closure activities (such as poems, sculpting, music, or drama).

A Model to Promote Student Centered Learning

The student centered classroom is not a new idea. In general, it involves the reversing the process of traditional teaching so the students, not the teachers take on "leadership in exploration, information gathering, and creating unity out of their education with the 'teacher' as guide and participating learner and as a resource person" (System Dynamics in Education pamphlet). In contrast, when the teacher is the authority for what is learned in an experiential outdoor education program, the teacher is also responsible for assisting students with the transfer of learning. Wilson (1995) states "I remember when I thought I'd reached a plateau in teaching when I could set a goal for the group, design a structure activity to 'teach' that lesson, and finally process it all to maker sure they got the point." We believe this puts an awful lot of responsibility on the teacher. When using the metaphor model the instructors need to conduct a complete and accurate assessment of needs to ensure ethical usage of metaphors (Bacon, 1987). How often is this truly possible? Few instructors are operating in clinical settings that use formal assessment procedures. If instructors are utilizing the Outward Bound Plus model then they design processing questions around what they think the group needs to learn. Instructors take responsibility for knowing student's issues. This can be difficult as it is often hard to separate our own issues and needs from those of the students. Using teaching methods that promote student directed learning makes the statement that the leader does not have all the answers. He or she is no longer the ultimate authority in the learning process. Some of the benefits discussed by Warren (1995) include the ongoing exploration of important questions like "What is learning?" and "What are the goals of education?" Utilization of student-directed methods is probably a lot more difficult that traditional teacher-directed methods. The payoff, we believe, will be increased self reliance of the students as they take ownership for what they learn. Our goal is, that as students become self reliant learners that they will embark on an ongoing journey towards life long learning. Before embarking on your own course to incorporate techniques for more student directed learning in your outdoor program you must first ask the question: "Do the students on this course want to have a role in their learning?" If the students are not interested in self reliance, these concepts will be difficult, if not impossible to promote. Assuming their answer is affirmative, consider implementing some of the suggestions in our model (see Figure 1). All learning experiences begin as teacher directed. At each stage of the model, there are certain goals, roles for the teacher, roles for the students. These need to be clarified and taken seriously. At the beginning of the course the program will be directed by the teacher. The roles that the teacher takes could include:

- providing initial structure, and focusing, serving as a role model for good facilitation
- providing information about the planned curriculum (we acknowledge that if a student is going to a program like Outward Bound the curriculum is pretty much set before they arrive)
- explains goals for course

Figure 1. Model showing the how self-reliance of the student increases as the teacher shifts power from him or herself to the students in experience-based learning. Primary experiences are on-going as is the student's organization of what is being learned from these experiences. The intended goal is the students empowered with the tools for self reliance and life-long learning.



- provides resources (library, activity, skills inventory)
- discussing roles of teachers and students
- teaches process skills
  - group thinking
  - decision making
  - leadership roles such as:
    - time keeper
    - feelings articulator
    - group conscience
    - question framer
    - summarizer (see Warren, 1995)
  - giving and receiving feedback
- listens to group; helps them identify their important issues
- provides choices where possible
  - choices of what to do (what to do) and/or
  - choices of process (how program is to be implemented)

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At the outset of the course, the student has some specific roles as well:

- deciding to commit to the concept of self-directed learning
- enthusiasm and energy
- participate in goal setting and role determination
- resource discovery and utilisation
- develop the community (sense of team, determining norms)

The transition phase is reached when students have committed to goals and roles, learned necessary group process skills and activity skills, and are prepared to use the resources at hand. In this transition phase the teacher needs to: continue to refine process skills; discuss changing roles; assist with evaluation; be a cheerleader, and intervene when it is warranted. A warranted intervention might be taking back power due to continued struggling on the part of the students, being asked to take power back by the students because of a legitimate need they have for direction, or a new part of the curriculum for which students do not have the skills and resources to know what to do. The students in this transition phase should be working to: reset ground rules; continue to clarify goals and roles; utilise group process skills; ask for assistance as needed; use the resources available to them; and conduct a mid-class evaluation. The teacher and students need to recognise that the transition is a difficult period. A change is taking place. Both teacher and students are moving from the know to the unknown. The teacher directed class is something most people are comfortable with. The unknown can be frightening. Expect the process to involve some struggle. Acknowledge what is being left behind, and celebrate what is ahead. The role of teacher as cheerleader, encouraging the group, can not be underestimated. In the student directed portion of the model new roles are assumed by both teacher and student. The students now:

- determine how goals can best be met
- facilitate activities as appropriate
- ask the teacher to facilitate where appropriate
- plan, problem solve
- conduct sessions to facilitate the 'organization of experience'
- utilise resources
- plan and assist with evaluation and closure

The teacher will:

- continue as cheerleader
- continue as resource provider
- facilitate as appropriate
- participate as co-learner
- plan and assist with evaluation and closure

Clearly this model will have some different implications for short courses and long courses. We think of a short course as being from one to seven days, and a long course as being eight days or more. You may have some groups for an entire school year!

When you have limited time with participants, you will not likely have the time to take them through the phases of this model. It does take more time. There are, however, certain things you can do to allow student choices and foster self reliance in the learning process. Choices can be offered, time can be spent discussing program goals and instructor/student roles, the

instructor can acknowledge the value of self-reliance and discuss its role in the learning process, and you can use creative activities that allow for individual expression in closure. For example, when teaching a rock climbing class, students can select the preferred method of learning: should it be done in small groups? should there be a large lecture, demonstration, and practice? should we divide into groups based on individual goals? They may not determine what will be taught, but they may be able to have some choice in the method of delivery. A discussion of goals can allow room for modification (depending on appropriateness for the course); a discussion of roles can clarify what the instructor will do, and leave open a space for students to state what they could do as well. Discussing the value of self reliance and its role in the learning process sets the stage for students to become more aware. Creative closure activities could include poetry, artwork, body sculpting, journal writing, and so on. These activities all allow for individual expression; this provides the students the opportunities to organise meaning from their experiences independently and as a group.

On a longer course the instructor will have more time to devote to discussions and planning that are required to implement ideas in this model. Students will be able to struggle with some lessons, learn from their experiences, and develop more effective strategies. All of the ideas that were suggested for the short course can be implemented, plus there is an opportunity to truly change the environment from a teacher directed to a student directed one.

Conclusions

As teachers in experiential education we have opportunities like no others to help students develop their capacities for intuitive learning. If we give students problems to solve and let them work them out in a way that they are invested in the learning process we can promote self reliance. Make conscious choices when choosing learning methods to promote those things which your students need to develop. If your goals include self reliance and skills for life long learning, consider some of these suggestions.

Is cheese food really food? As experiential educators, it may be a mistake to overvalue discussions, especially if they are teacher directed. When you decide to intellectualise after an experience, make that choice a conscious one, not a defacto decision "because that's the way it's done."

Annotated Bibliography

Adventure Education Models

Bacon, S. (1997) The evolution of the Outward Bound process. Greenwich, CT: Outward Bound, USA.

Bacon describes two approaches historically used by Outward Bound: the 'Mountains Speak for Themselves' and 'Outward Bound Plus'. Assumptions, the role of the instructor, pluses, and criticisms are presented for each. Bacon then makes a case for a new technique where the instructor can consciously frame course events so that they become metaphorical for salient changes in students lives. The purpose of the metaphor model is to reassert the primacy of experience (as opposed to intellectual discourse about experience) and to move toward what Tom James terms 'deep play' (p. 29).

Schoel, J., Prouty, D. & Radcliffe, P. Islands of healing: A guide to adventure based counseling. Hamilton, MA: Project Adventure.

This book provides a comprehensive discussion of the rapidly growing adventure based counseling approach to conducting adventure programs. "How to" information on group selection, training, goal setting, sequencing, introducing, leading, and debriefing activities is included. Discussion of applications includes junior and senior high schools, a psychiatric hospital, and court referred programs.

Student-Centered Learning

Wilson, L. (1995). When we want to empower as well as teach. In K. Warren, M. Sakofs, J. S. Hunt Jr. (eds.) The theory of experiential education (3rd ed.), pp. 275-284. Dubuque, IA: Kendall/Hunt Publishing Company.

Wilson writes of her years of experience as a learner/teacher using experiential methods and empowering the learner. She articulates strategies she discovered for helping students see themselves as key actors in the learning process. She explains ideas for using real situations, role play, simulation, giving choices, interpreting individual and group themes, and becoming a co-learner.

Warren, K. (1995). The student-directed classroom: A model for teaching experiential education theory. In K. Warren, M. Sakofs, J. S. Hunt Jr. (eds.) The theory of experiential education (3rd ed.), pp. 249-258. Dubuque, IA: Kendall/Hunt Publishing Company.

Warren describes what she has learned through five years of using the student-directed classroom method to teach a course in the theory of experiential education to students at Hampshire College. Students are empowered by the teacher who prepares them with the tools they need for determining their course of study. Warren emphasizes techniques for the teacher to transfer power to the students, rather than abdicating power, which would result in confusion.

Philosophy

Crosby, A. (1995). A critical look: The philosophical foundations of experiential education. In K. Warren, M. Sakofs, J. S. Hunt Jr. (eds.) The theory of experiential education (3rd ed.), pp. 3-14. Dubuque, IA: Kendall/Hunt Publishing Company.

April Crosby traces the general beliefs behind the philosophy of experiential education. Following a discussion of epistemology and metaphysics, Crosby provides a common sense explanation of the historical/philosophical underpinnings of experiential education from the Sophists to Kant. She concludes with a discussion of John Dewey's philosophy which provides, according to Crosby, "the foundation for what most people call experiential education."

Hunt, J. (1995). Dewey's philosophical method and its influence on his philosophy of education. In K. Warren, M. Sakofs, J. S. Hunt Jr. (eds.) The theory of experiential education (3rd ed.), pp. 23-32. Dubuque, IA: Kendall/Hunt Publishing Company.

Hunt outlines Dewey's method of philosophy beginning with his attack on dualism. After outlining Dewey's philosophical method, he connects it with his philosophy of education. Dewey rejects "traditional education's obsession with the secondary aspect of experience." Hunt illustrates Dewey's views on the effects of dualism in education with a discussion of freedom versus authority. He argues that Dewey's philosophy is as relevant and needed today as it was in 1920.

Kraft, R. J. (no date). Towards a theory of experiential learning. In R. J. Kraft and M. Sakofs, The theory of experiential education (2nd ed.), pp. 7-20, Boulder, CO: Association for Experiential Education.

Kraft describes the philosophical foundations of experiential education. He begins with the problem of trying to define experiential education and moves into the philosophical foundations of experiential education. Included are Plato, Aristotle, Descartes, Locke, Mill, Pierce, James, Dewey, Mao-Tse-Tung, Friere, Piraig, and finally, Kurt Hahn. The article continues with sections on the psychological foundations, anthropological foundations, and research and evaluation in experiential learning.

Additional References

Austin, D. A. (1991). Therapeutic recreation: Processes and techniques (2nd ed.). Champaign, IL: Sagamore Publishing.

Hahn, K. and Mashiboff, M. (1995). Knowing human movement. (in press).

Land Access, Protection and Permits

By
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Abstract:

This proceedings paper is a general summary of discussions occurring on the panel presentation facilitated by Keith Thurman of the Access Fund and Steve Russell of Prescott College. A follow up meeting was held during the "best of the best" time slot which was facilitated by Jim Hodgers, AORE board member and outgoing chair of the land use committee. Subheadings are used in the text to break it up by content areas. Opinions expressed are paraphrased from the discussion or are my own. No policy reviews were completed to assure accuracy of statements regarding specific regulations on use of public lands.

Format of Panel Discussion

A go round style introduction of participants on the workshop provided a way to scope the issues facing University based programs today. It served as a good introduction of students and professionals gathered at the meeting. Several common threads emerged as the 25 or so people in attendance summarized the land use issues each program is experiencing on their home locations. This round table process took about half the time scheduled for the meeting. This was an investment on the part of the group, but a good use of our time in the sense that we acquired a good broad view of the issues as expressed by a peer group.

Discussion Summary

There was quite a bit of frustration expressed about the different federal bureaucracies managing public lands. Much frustration was based around inconsistency in management policies related to educational and recreational use of public lands. Although many of the issues are centered in the West, people from Mid-West and Eastern schools discussed issues of State managed park lands and private property in addition to federally managed lands. River issues were mentioned in Southeast locations that receive concentrated private use and also of organized commercial trips.

The consistent point made during the go round was the inconsistencies experienced with the various agencies in permitting of organized groups. There is just no predictable consistency in how agencies or personnel within agencies will interpret organized use by colleges and non profits. Occasionally these inconsistencies will have merit when issues end up interpreted in favor of access for the program. It was pointed out that we do not as a profession represent ourselves in any organized fashion. There is no consolidated movement towards creating a collective voice for land use among educational users. A counter point was made that it would be difficult to represent the profession because of the diversity of outdoor programs across undergraduate education in America. A collective voice is not easily heard from such broad constituency.

Programs--Recreational or credit bearing

Dunmire illustrated this diversity by describing how programs differ on different colleges. Most programs are offered as extra curricular recreation opportunities to balance out a student's academic program. Other programs may be taken for credit under physical education departments. Many programs have well developed recreation degree programs that utilize outdoor pursuits as a part of their curriculum. One college may run several types of programs under one administrative umbrella.

Degree programs in Outdoor Adventure Education or Wilderness Leadership are also offered on some colleges and make use of public lands in credit bearing curriculum. These organized credit bearing and non credit bearing programs are joined by other program types on the university including common adventure programs and clubs. This was offered to show how it could be difficult to create a unified voice for the profession nationally.

Definitions, Non-Commercial, Commercial, Semi Public

Discussion turned to particulars of how outdoor programs have been defined for permit purposes and the general grey area of permit definitions. The problem of definition for educational trips was clear to the group since there are very few specific permit definitions that apply directly to educational groups. Most permits are described as non-commercial or commercial. We reviewed these definitions and it was the groups view that neither of these definitions fit most of the activities sponsored by the colleges represented at the meeting.

There was strong opinion that a positive direction to head was to pursue a specific use definition for educational programs conducted under permit on the various public lands. There was general agreement that it would be nice to have a use definition that fit your activity instead of not have a category to fit in. We reviewed the definitions for commercial use noting from agencies and agreed that the interpretation of many university programs as commercial is the more accurate definition. Several universities represented at the meeting were using commercial permits for their programs. This brought up many other issues for program people at the meeting. Outward Bound and NOLS were mentioned as examples of non-profit programs that operated under commercial permits for their access to public lands.

Mike Tennessen shared background information on a different type of definition of use that has been helpful for agencies in finding a more accurate category from which to manage educational use of public lands. This permit category was described as "Semi Public Outfitting" The Gallatin National Forest issued permits to the Montana State University at Bozeman under this definition. The Program Director from Bozeman offered this as a alternative definition to pursue with the agencies. He produced some documentation of this permit type and offered to post it for others to examine.

Special Use Permits

Being under a commercial use definition may have some advantages for colleges because it may be the only type of official mention that can be obtained. Special Use Permits are common on Forest Service lands. It is the impression

of agriculture's commercial permit. For use of forest lands, agencies may have well developed administrative systems to process commercial permit applications and management of the subsequent use. This is not always the case and others offered the opinion of local agencies being inefficient or overworked with respect to processing permit applications. Special use permits are usually done by individual ranger districts in each forest. There is a great deal of variety between different ranger districts. Some ranger districts may require as much as a one year lead time to process permit requests.

Most ranger districts may have discretion in place on issuing new special use permits in wilderness areas. Generally the agency will be required to permit some of information and documentation from the outside. In certain circumstances the forest may have to do a NEPA process. Limits of acceptable change (LAC) or some other administrative process which results in a considerable investment on the part of the agency and the program. The point was made that all areas in other major developments or businesses run under the same type of permit that a Forest may require for a outings group running a week long leadership seminar in the Forest.

Impacts on Resources

The problem of increasing use and the additional demands placed on the natural resources by the growing numbers of organized groups made up on this type. It was acknowledged by many that part of the cause of over-crowded problems on federally managed lands has helped draw to the permanent possession on the lands. This can be viewed simply as supply/demand. There are many many more organized "services" using the outdoors for recreation, whereas in a place to conduct outings for any number of other special purposes. The land manager is in a tough place being charged with protecting the natural conditions from deterioration in the face of increasing pressure for use from all the various constituencies.

Outdoor education programs and organized recreation groups have joined the cause of special interest groups in that it has become necessary to lobby the management agencies for access. On forest lands, the agency is beset with demands placed on the resource by a whole host of "multiple users" with a legislative mandate to accommodate this variety of uses. All the agencies are tasked with stewardship of their lands. On forested lands under management by the National Park Service, the agency has the additional mandate to provide for access per balance need to conserve natural values for later generations of visitors. The issue in the outdoors has coincided with additional legislative mandates and a more modern era in recreation management.

The Wilderness Act of 1964 created legislation that bridged across agencies with a specific set of management principles to regulate designated wilderness lands. These principles identify protection of the existing natural conditions as the land as a primary management objective. An important as the additional protection in for the resource, is creating a minimum management standard with respect to visitor impacts. An end result of this is limited limitations in areas actively being managed to preserve their wilderness values. One resource monitoring methods used is the "Limits of acceptable change" process provide agencies with more quantified data that show impacts to the resource from human recreation.

[illegible] standards have been developed to quantify the subjective element of "user experience" and "opportunity for success". There are areas that may have received funds but are receive enough evaluation that is to thought that the natural values for recreation have been impaired by the mere existence of purpose.

The group shared a user's opinion for the evaluation tools in the federal agencies tasked with managing our natural resources. The processes being here are beyond what the lands nor evidence and natural values are being degraded. Since the recreation tools do have been connected human impacts in highly visited areas. Recreation use and subsequent impacts are being tracked in with other uses and are necessarily being seen as any difference a use or that may occur or happen. An damage is expressed about the land stewardship role outlined by the NRM and BLM where resource extraction has been the dominant management priority for nearly a century. That role appears to be a fully promoted public right though with anticipated importance as the BFS moving are to equally considered. Recreation outdoor education programs have a body of bureaucratic hurdles to leap just to access public lands to conduct activities they feel have positive, even intrinsic benefits for the public. Those public are the lands for? The recreation industries of rubber, mining, and grazing have left much of our natural heritage in a state of ruin. The agencies have been in partnership with industry to allowing that to occur.

The subjective offering of the recreation tools are not being felt in more popular areas where crowds of visitors have created natural impacts that are obvious and significant, but the nature of these impacts does not compare to the impacts created by dominant resource extraction. In one term that impacts on subsequent users of public land have overwhelmed recreation use and have impacts on lower areas of lands.

Problems, problems, Solutions ??

The group was tired of sharing similar problems common to all of us. Focus that turned to what can be do as a profession to work towards solutions. So, Thanks had a unique perspective coming from outside the outdoor education community but actively working with agencies towards solutions to specific areas. His point was that as BLM project successes as the best source of ongoing problems to the public is the reaching of outside impact mapping techniques. He suggested a viable conservation tool the "Leave No Trace" program sponsored by REI to volunteers work the summer. This program is one of subsequent organizations based out of Denver. This group shares a common office space with the Access Fund and they. Identifying outdoor education programs as the source for knowledge to share with the may help agencies recognize the positive impact programs can have on the resource by producing knowledgeable [illegible]. It is recognized that a small number of individuals in popular areas can create alot of impact on a short time. Although the outdoor experiences on the lands by the outdoor education programs are quite large the actual impacts on the resource may be lower than subgroup with the same number of persons over days since groups camping in a more concentrated manner and have a tendency to minimize impact points.

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We closed thinking about ways to keep the information exchange happening between interested professionals. Munsell wants to create a targeted survey to distribute to college programs to see what type of permits most schools have and especially what their current land use issues are. News updates in the ORCA flash or the AORE newsletter would be helpful. Jim Rodgers implored the group that someone needs to join the land use task force to organize the AORE effort.

MANAGING GROWTH IN YOUR OUTDOOR RECREATION RENTAL PROGRAM

Presented by:
Rob Jones & Brian Wilkinson
University of Utah Outdoor Recreation Program

The goal of this workshop will be to have an open discussion of these and other items of interest to the workshop participants. We don't claim to have all of the answers but we do have some experience dealing with these issues. If you don't see an issue listed below, please feel free to bring it up. We can all learn together.

I. A. Defining the type of program you have, finding your niche.
   1. Outfitting Service.
   2. Cooperative Adventure Program.
   3. Rental program.
   4. Combination of the above.

II. A. Identifying issues of importance.
   1. Working with volunteers.
      a. Trip/shop volunteers
      b. Getting help on special projects.
   2. Working around school schedules of student staff.
   3. Equipment purchasing, maintenance, replacement. Used equipment sales/swaps.
   4. Equipment storage & Space Utilization.
      a. Seasonal rotation
      b. Multi use storage systems, built by volunteers.
      c. Computerized inventory and rental systems.
         i. Use of supplemental rental contracts.
   5. Managing your resource center.
      a. Books, magazines, videos, maps.

III A. Working with other departments on your campus.
   1. Are you part of a bigger department?
      a. Keeping your program visible while supporting the department's agenda.

b. Using departmental resources ie, bulletin boards, club meetings, staff training etc.

2. Promotion through residence halls, athletics dept, student groups ie. foreign students, clubs etc.

IV A. Working with Local Business (mutual support).

1. Promotion of business who provide a similar service to those you can't serve.
2. Providing space on campus for outside groups.

V A. Evaluating your programs.

1. Evaluating daily rental operations, equipment and staff.
2. Participant evaluations of trips.
3. Trip Coordinator evaluations of trips.

The proceeding pages were supplied as an outline to stimulate discussion at a round table on the issues of managing growth in a university based outdoor recreation program rental office. At the roundtable participants were encouraged to bring up, for discussion, any issue they had questions about. A number of issues were discussed including: Surplus sales of equipment, equipment storage, computerization, rate structures, maintenance/cleaning fees, late policies and program evaluations. A brief summary of ideas and comments follows along with a list of workshop participants.

1. **Surplus Sales.** It appeared as though some organizations were not allowed to hold sales to dispose of surplus/used equipment. The equipment needed to be turned over to a surplus agency, and the program had little or no involvement in its disposal. A number of ideas emerged:

   A. Work with your surplus agency to take over the sales of the items, and cut them in on a small percentage of profits. This allows the program to handle the sale, the paperwork etc, and yet allows the surplus agency to feel it has an oversight function.

   B. Sell any item valued at over $500.00 on a sealed bid basis. This eliminates any appearance of selling equipment to friends of the program at cheap rates, or other misuses that the Surplus office could be concerned about.

   C. If student money is used to purchase the equipment work with the surplus office to explain that as student owned equipment, rather than state equipment, a sale sponsored by the rental shop is the appropriate way to turn over used equipment.

   Surplus sales of equipment are also a great way to showcase or promote your program. Program managers need to do all you can to incorporate a sale into your equipment replacement system.

2. **Equipment Storage:** This topic is as varied as are the programs represented at the roundtable. Space, budget for storage systems, seasonality of equipment, and types of equipment offered are all factors included in how equipment is stored. The following ideas were discussed:

   A. Use volunteer labor and if possible materials scavenged to build storage shelves that have more than one use. Create bins so that each item has its own resting place, and it is easier to see availability of that item, while also keeping the equipment better organized.

   B. Multi-function storage systems. For example, riverbags and snowshoes can be stored on the same shelves if organized seasonally.

   C. If necessary off site storage is available for seasonal equipment.

D. If your shop has high ceilings, lofting of equipment is also available for seasonal items.

E. A couple of programs use movable storage systems. These systems are commercially available and range in price from inexpensive to exorbitant. A simple shelving system put on casters will work depending upon each program's needs.

F. The issue of sleeping bag storage and laundering was also discussed. Most agreed that the use of sleeping bag liners was a must. Each liner would then be laundered after each use. Laundering of bags ranged from each use to once a year or as needed. Each program needs to assess its own laundering needs, however if frequent laundering is desired, a large front loading machine is recommended. As for storage, the simplest system seems to be to use heavy duty metal retail display hangers inverted in the bottom of the bag. The hangers can then be hung on a piece of conduit suspended from the ceiling. This is an easy way to hang bags and optimize the use of space.

3. Computerization Issues: Again a wide variety of issues must be addressed when a program wants to decide if it is time to computerize. The transition to a computer based program can take time, as well as costing a significant amount of money. There are a few software programs available, the one I have personal experience with is Booktops. The software works very well, but like any computer database the data out is only as good as the data input. The largest single problem is proper training of staff in utilizing the system. Computerization can provide a manager with a host of data which can be used to manage your program. Everything from customer mailing lists, frequency of item use reports, item demand and availability reports, cash handling reports etc.

4. Rental Rate Structures: Depending upon the individual rules and regulations imposed on each program by their University Administration, a rental shop may or may not rent to non-student, faculty or staff users. Most programs agreed, however, that if equipment is rented to members of the general community that different rates should apply. Generally programs had on of the following rate structures.

A. Flat rates for any customer, be they students, faculty staff or community members.

B. Two-tiered rate structure: Student rates and a higher Non-student rate which would apply to any renter not a currently enrolled student.

C. Three-tiered structure: Students pay the lowest rate, Faculty & Staff have a slightly higher rate and finally General Community members have an even higher rental fee.

5. **Late item policies:** Most programs agreed that items returned late should be charged some type of penalty fee. The late fees typically included an additional day fee for each day the item is late along with a penalty fee ranging from $2.00 to $20.00. Another area discussed was whether or not programs use cash deposits, student registration holds or other means to secure the rental. Generally it was agreed that if a hold is available it is a good means of guaranteeing the equipment is returned and properly cared for and returned. Most programs felt that this was not a huge issue, and that overall students were responsible for themselves and the equipment they rented.

6. **Miscellaneous Issues:** Finally a number of issues were discussed including:

   A. Programming your trips and activities to support or increase your rental revenue.

   B. Purchasing equipment specific to men as well as women. A number of manufacturers are developing equipment to fit women such as sleeping bags, packs, climbing harnesses etc.

   C. Evaluating programs including user evaluations of equipment and programs, staff evaluations and trip leader evaluations. All agreed that by taking the time to visit with customers you could do a lot to improve service and evaluate that particular customer's interaction with the program.

LIST OF WORKSHOP PARTICIPANTS

NAME	ORGANIZATION	PHONE #
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Mike Lewis	Appalachian State Univ.	(704) 265-4141
Stephen Ladas	Univ. of Calif. San Diego	(619) 534-9668
Ella Lynch	Cornell University	(607) 255-6647
Andrew Martin	Middle Tenn. State Univ.	(615) 898-2156
Fonya McBrair	Fort Fisher AFB	(910) 458-4205
Gene Mims	Univ. of Idaho	(208) 885-6170
Kelly Nebel	Butler University	(317) 931-1372
Bill Parks	Northwest River Supply	(800) 635-7202
Cindy Pierce	Univ. of Calif. Santa Cruz	(408) 459-2807
Duane Sandore	Spangdahlem AFB	0-11-49-6509561717
Jill Storer	McChord AFB	(206) 984-3900
Mark Reynolds	Univ. of Alberta Dept E.S.M.	(403) 789-4400
Mike Sutherberg	Univ. of Calif. San Diego	(619) 534-3534
Alf Stenstrm	Univ. of Calgary	(403) 220-6800
Colleen Swager	Univ. of Calgary	(403) 220-7095
W. F. Taylor	Middle Tenn. State Univ.	(615) 898-2156
Brian Wilkinson	Univ. of Utah	(801) 581-8516
Shigeru Yamamoto	Univ. of Calif. Davis	(916) 752-4163

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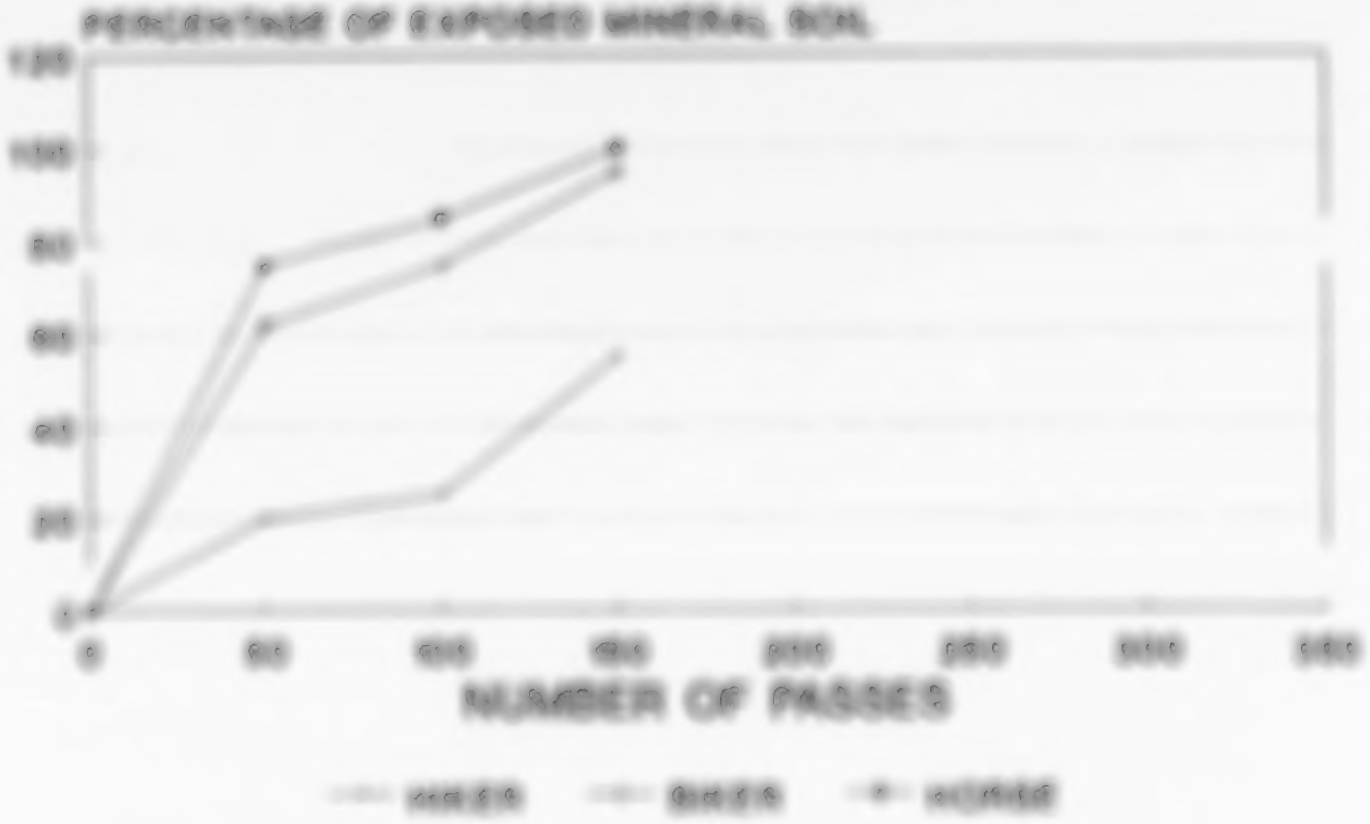
[redacted]

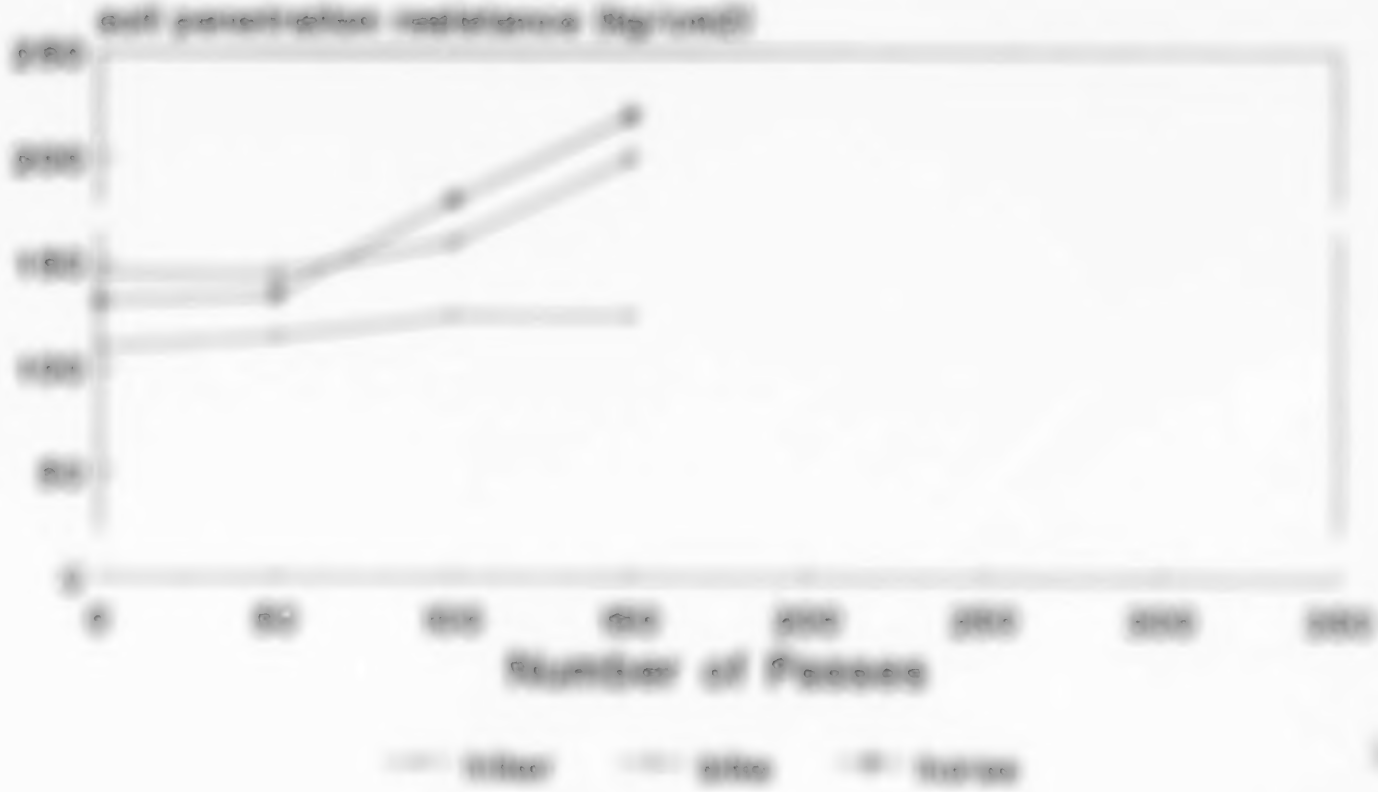
[redacted]

[redacted]

MINERAL SOIL EXPOSURE
CHART ONE



SOIL COMPACTION
CHART TWO



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Organizing A Climbing Competition

Tim Steele
Route Setter, RockQuest Climbing Center;
Trips and Workshops Staff, Miami University
RockQuest: (513) 733-0123
Miami Outdoor Recreation: (513) 529-1991

Abstract:
This workshop is designed to help a relative new comer to the world of competition sport climbing by taking them through the basic steps of organizing a successful event. The workshop will cover both ASCF sanctioned events and non sanctioned (informal) events. Issues which will be addressed include: ASCF sanctioning requirements, judging, route setting, format options, sponsorship, event organization, publicity, and competitor expectations and needs. The workshop is intended to be an informative session with plenty of opportunity to ask questions and voice concerns.

Preface:

So you want to hold a climbing competition? Great! Climbing competitions are a great way to foster a climbing community and showcase your facility. Climbing events have become more widespread and complex in the last few years. More consistency exist between events now than ever before. It is important to have a well organized, well run, "professional" event to add to the growth of this exciting sport.

Some basic questions will exist as you start to plan your event. Perhaps the first question you should ask yourself is: "who is the event for?" By answering this simple question you will be able to quickly answer a number of other questions such as: "should we work with the American Sport Climbing Federation (ASCF)?," "Should we seek sponsorship?," "How should we run the event?," and "what will the cost of the event be?"

Who is the event for?

The most common type of climbing event hosted by outdoor recreation programs is an informal, non-sanctioned event. The focus of the event is to have fun and foster a positive experience for the climbing community. If your goal is to have an event aimed at attracting mostly beginner and intermediate climbers then there is no need to sanction your event through the ASCF. However, you may want to order a copy of the ASCF rules so that you don't have to create your own scoring system.

If you plan on drawing elite level climbers, then a sanctioned event would be more appropriate. Keep in mind that mixed events are another possibility. Mixed events allow for a fun event for novices as well as a point awarding system for advanced climbers. These events are sanctioned, but only the elite climbers benefit from the sanctioning. However such events usually attract better sponsorship, so novice climbers benefit from the higher quality prizes which can be awarded. Two outdoor programs which have taken this route are the Chapel Hill Parks and Recreation Program and the Miami University Outdoor Pursuit Center.

What is the ASCF?

The American Sport climbing Federation is the sanctioning body for top American competition climbers. This body sanctions a number of events of different magnitudes. To date there are four levels an event can fall under: Local, Regional, National, and National Championships. The primary difference between such events is the number and caliber of climbers it draws and the cash purse, awards, and points which are given. Ranked climbers use their points to justify sponsorship, and open up opportunities for themselves such as the ability to compete at World Cup events, Invitationals, and to earn a spot on the U.S. Climbing Team, which may eventually factor into Olympic events.

A sanctioned event will require you to have an ASCF certified judge and an American League of Francoeurs (ALF) Route setter. Because of the caliber of sanctioned events consistency in judging and route setting is vital. Although $600-1,000 may seem like a lot to have a judge and route setters, it is a small price to pay for hosting a well received, high quality event. You will need to contact judges and route setters well in

advance of your event. Realize that it will take a qualified route setter at least 3 days to set for a Regional and up to a week to set for Nationals! For more information regarding ASCF sanctioning see the appendix or call Hans Florine (510) 376-1845. For route setting information call Steve Schneider (ALP President) (510) 652-2010.

How do you score the competitors?

The preferred method of scoring is through the "highest hand hold held" system. In this system, climbers start from the same hold(s) and maneuver through a pre-set course (route) to a predetermined finishing hold. It is the job of the route setters to ensure that the course they set will evenly distribute the competitors (a tricky task). Ideally, depending on the round, only one or very few climbers will reach the top. Courses which are too difficult are also problematic because they may lead to bottlenecks where many climbers (or Competitors are scored on the highest handhold they hold with control (a call based on one's knowledge of judging). In this way competitors are scored and moved on or eliminated.

Usually it is best to have a number of rounds (it is required in ASCF events). Typically there is a preliminary round used to eliminate the majority of climbers. Two to six routes are usually enough to do this, with an average of four being best because it gives all climbers a chance to climb and have fun before being eliminated. Also, more routes help stratify the climbers more efficiently. The next rounds would be semi-finals and finals (usually having one or two routes each). In non-sanctioned events, semi's are not necessary.

The normal number of allowed falls is one. That means, once a climber falls their climb is over.

The best source of information for judging and scoring is the Official ASCF Rules, by Peter Davies. You may also refer to the rules included in the Appendix. Notice that separate rules exist for different divisions.

Format of an event:

For an informal event the format should be more relaxed. Give climbers plenty of time to preview routes, climb, and socialize. The event is, in many ways, a non-competitive: climbers should be able to encourage and help one another. It should not be an energetic event (at least until the finals). The focus is on having fun. You may opt to make the finals energetic (i.e. climbers do not get to watch each other climb the routes, they are kept in isolation). This can add an element of excitement to the event and gives the climber extra special recognition as they are the only person climbing in front of cheering spectators. It also makes the finals fair for the first climbers in the finals round who have not seen anyone climb the route.

An ASCF sanctioned event should always be energetic for the elite climbers. A good way to run the preliminary round is to have climbers come out of isolation one by one and complete the allotted routes back to back with a time limit. It is a rigorous mix of exercise and finesse. The semi's and finals should also be timed energetic rounds.

- For an example of the Rules and format of a successful ASCF Regional event, which attracted sponsors and elite climbers refer to the Appendix.

Sponsorship:

The decision to seek sponsorship should be carefully considered. The key point regarding sponsorship is that it is a symbiotic relationship - it should not be seen as simply getting "free gear." Ask yourself: "what can I genuinely offer a sponsor?" Elite climbers generally already have sponsorship; sponsors are really looking at the market which your event will make available that is receptive to their products (i.e. non-sponsored climbers and people entering the sport).

As a minimum you should offer sponsors the opportunity to have their logo on all publicity, T-shirts, and posters. They should receive a complete competitor mailing list. They should also receive some sort of verbal gratitude at the awards ceremony. If they desire to demo or showcase their products at your event, they should be allowed to do so.

Keep in mind that your event does not have to be sanctioned in order to get sponsorship. You do need to sell your event to the sponsor. Also, consider seeking sponsorship locally and from non-climbing related

competitors. Realize that the popular climbing competitors cannot sponsor every event and that they receive hundreds of requests.

Publicity:

Publicity is vital to the success of your event. Start well ahead of time by contacting Climbing Magazine, Rock and Ice, and others at least four or five months before your event.

Begin to publicize your event with approximately 4 months of notice for an ASCF National, 3 months for a Regional, and 4-6 weeks for a Local or more informal event. Send out competition registrations with at least 6-8 weeks of leeway. Remember that mailers will take easily a week to reach some people and that long to get back, not counting dead time at the recipients home.

Local publicity is a great way to showcase your programs and facility. Usually, local news and Radio will not need to be informed of the event before two weeks prior to the event.

Competitor Expectations:

All competitors expect to have fun. However, it is safe to make a few generalizations about competitors based on their divisions.

Novices usually enter competitions to have fun, experience something new, hang out with friends, meet new climbing partners, challenge themselves, and maybe win a prize. Novices and intermediate level climbers are usually not on a strict competition and training schedule. If they don't win, they don't really care as long as the event was fun.

Advanced and elite climbers want to have fun, win prizes and money (they don't care about gear as much as novices), and want to participate in a well organized, fair, consistent event. In general they don't care for a lot of hoopla- they desire to compete (either win or lose) and get the heck out of Dodge!

Competitors expect fair, consistent judging and expert route setting.

In the isolation room expect to allow for route to stretch, warm up, and provide for a warm up bouldering wall (must be steep for advanced and elite climbers who have to attempt to complete 5.12c and harder). Escorts will be needed to allow competitors to get drinks and use rest rooms if they are outside sight of the competition wall.

Prize and cash purse distribution should be fair in each division. For an example of Miami University's prize distribution see the Appendix.

HELP!

Organizing a quality competition is a big undertaking of one person. It takes many people to make and event run smoothly. Most advanced volunteers and paid officials are a must. Recruit help early and reward the help when ever possible. Make it fun for them. Some typical job assignments are: Registration, Isolation escorts, Belayers, route judges, head judge, Scoring, Route setters, and pre and post activity set up and take down.

Consider involving the Access Fund in your event. Typically they will ask you to run a great raffle to raise money. This is a great way to let non-competitors and those competitors who did not make the finals run for prizes.

Remember the golden rule of event organizing. Allow yourself time. After the event, reflect on changes that could be made to make your next event even better. Have fun and good luck.

[illegible]

[illegible]

CLIMBING COMPETITION TIME LINE

6-9 Months before event:

- *Call the ASCF to Schedule the event and pay fees*
- *Contact an ASCF Judge and an ALF Route setter*
- *Begin to Contact Sponsors*
- *Call Climbing Magazine, Rock and Ice, and other publications (send announcements*
- *Begin to recruit help for event set up, day of, and breakdown*

3 Months before event:

- *Re-contact Judge and Route setter to find out membership dues*
- *Call sponsors to finalize contributions*
- *Contact Access Fund (if you wish to support their organization)*
- *Send out competition flyers, posters, and sign-up packets (8 weeks before event for Beginners, 3 months for Nationals)*

1 Month to 2 weeks before event:

- *Contact all sponsors that haven't sent prizes*
- *Send response notices to competitors*
- *Hold one or more volunteer meetings (judge, route setter assistants, set up and take down crews, belayers, etc.; dry run)*
- *Acquire chairs, tables, stop watches, a computer (scoring), clip boards, etc.*
- *Make climber packets (include score badge, score card, rules, brochures, other pertinent info.)*
- *Send out PSA's, Press releases, and coverage of event (2 weeks before event)*

1-2 Weeks before event:

- *Route setter will come in (1 week several days to set depending on caliber of event)*
- *Contact local news (, hype up the event!*
- *Organize, Organize, Organize!*

Days of Event:

See Attached "Days of Event" routine

Post Event:

- *Send out scores to ASCF*
- *Send out Thank you letters to sponsors and help*
- *Send Access Fund Membership in*
- *Send out scores and press release to Magazines*
- *Clean up the area!*
- *Throw a staff party!*

American Sport Climbers Federation

The "Simple to Join the ASCF" Form

Name _____

Address _____

City _____ State _____ Zip _____

Country _____ Citizenship _____

Phone _____

SS# _____ Date of Birth _____ Sex _____

Local Gym(if any) _____

Send check or money order with application
in the amount of $25.00
Payable to:
ASCF
35 Greenfield Dr
Moraga, CA 94556

American Sport Climbers Federation

The "Simple to Join the ASCF" Form

Name _____

Address _____

City _____ State _____ Zip _____

Country _____ Citizenship _____

Phone _____

SS# _____ Date of Birth _____ Sex _____

Local Gym(if any) _____

Send check or money order with application
in the amount of $25.00
Payable to:
ASCF
35 Greenfield Dr
Moraga, CA 94556

ASCF suggested prize distributions. [illegible]

$20,000 purse

	men	women
1st place	$ 5,000	$ 5,000
2nd	$ 3,000	$ 3,000
3rd	$ 2,000	$ 2,000
4th	$ 1,400	$ 1,400
5th	$ 1,000	$ 1,000
6th	$ 800	$ 800
7th	$ 600	$ 600
8th	$ 400	$ 400
9th	$ 200	$ 200
10th	$ 100	$ 100

$40,000 purse

	men	women
	$ 8,000	$ 8,000
	$ 5,000	$ 5,000
	$ 3,000	$ 3,000
	$ 2,000	$ 2,000
	$ 1,500	$ 1,500
	$ 1,000	$ 800
	$ 800	
	$ 600	

$10,000 purse

	men	women
1st place	$ 3,000	$ 3,000
2nd	$ 2,000	$ 2,000
3rd	$ 1,500	$ 1,500
4th	$ 1,000	$ 1,000
5th	$ 800	$ 800
6th	$ 600	$ 600
7th	$ 500	$ 500
8th	$ 400	$ 400
9th	$ 300	$ 300
10th	$ 200	$ 200
11th	$ 100	$ 100
12th	$ 100	$ 100

$1500 purse

	men	women
	$ 400	$ 400
	$ 300	$ 300
	$ 200	$ 200
	$ 100	$ 100
	$ 100	$ 100

$500 purse

	men	women
1st	$ 100	$ 100
2nd	$50	$50
3rd	$25	$25

(First and second place for Women and Men must be the same.)

American Sport Climbers Federation

As of December 1994

Organizer's responsibilities when holding an ASCF sanctioned event

Run a safe event

Run the event in a "fair" manner. (No local advantage, etc.) ASCF sanctioned judges are required at all events. Straight bonus competitions at Nationals, and final routes at Regional and Local events. Recommended format for Nationals is "Three rounds: qualifiers of two routes in up final, two routes in semi-final, and one route in final (6 men and 10 women finalists score to advance to semi-final, 10 men and 7 women to final). ALF courses without required or have one finals. (Recommend on route to score competitions, more rules apply, please read

Organizer agrees that all TV rights and other such media and promotional rights to any ASCF event are owned by ASCF, unless specifically agreed upon in writing by the ASCF.

Guarantee the payment of cash prize money to both competitors as follows:

$5000 for a National Championships	$3000 for a National Competition
$1000 for a Regional Competition	$500 for a Local Competition ($250 if less than 10 in the open)

The ASCF has a suggested prize distribution for various purse levels, men and women's. 1st and 2nd place be equal. Prize distribution may have accompanied this document. Junior events: no required prize purse

Publicize the event with enough exposure to generate an interest/participation level commensurate with the level the event. Minimum required is advertising at least months notice for Nationals, seven weeks for Regionals, four weeks for locals. Must mention ASCF in promotional and ad materials. ASCF mailing available

In general, cover all costs related to the material organization and running of the event, including necessary insurance. (Your insurance must specifically cover the event). Run a safe event.

Pay ASCF sanctioning fees, before event, and other membership related items per below.

1995 Sanctioning Fees

National Championship	$500	
National	$400	Junior National: $100
Regional	$150	Junior Regional: $50
Local	$75	

Cooperate reasonably by sending ASCF, $5, $10 and $15 for each non-ASCF member at Local, Regional and National competitions. Additionally, this is a "litmus" test as to determining how many ASCF members. Organizer must also collect and send new member fees and information ($5, $10 and from non-participating kids, but must get new annual members.

You must give ASCF members in the open a $5, $10, and $15 discount

Provide results, annual and 2/3/5 membership fees collected at the competition to the ASCF shortly after the event

Work hand-in-hand with the ASCF before the event. Read all literature, developing the event criteria, work event, and, format. ASCF judges are public to do, can and assist chief judge in instructions, and any questions you may

Send all fees and sanctioning requests, fees, memberships, results, etc. to:

Matt Stevenson

ASCF Area Rep

Mail ASCF FORM #####-###-#

Organizers check list: please signoff/check off the following and send to the ASDT before the event.)

1. Level of event(Local, Regional, National ,IR, Regional, Etc.)_____

2. Proof of proper insurance that specifically covers event(enclose) _____

3. Proper prize money secured per item ? _____

4. Judge(s) names _____

5. Route setter's name(s) _____

6. Name of competition _____

7. Date(s) of competition _____

8. Brief, or detailed, description of format _____
_____
_____

9. Check for related fees enclosed _____

10. Flyer/poster/advertis form, for competition gives discount to ASDT members _____

11. Please refer to the highest category at your event as the "Open Category" _____ (not "Elite" or "Master" or any other such derivation). (Discount in item 10 need only apply to "Open Category), and IR events)

12. Belayers have been and will be checked for competency _____

13. Publicized event in as many ways as imaginable with "ASDT Sanctioned" in all literature _____

14. Your name and title _____

15. Your signature here professes the above is true and guaranteed _____
page many (date)

16. Address and contact numbers)_____
_____
_____

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Ranking System Change

Place	Event	Regional	National	National Championships	World Cup Points	World Cup Rule
1st	5	5	5	5	1 Point	Automatic Gift
2nd	4	4	4	4	2	4 Years
3rd	3	3	3	3	3	3 Years
4th	2	2	2	2	4	2 Years
5th	1	1	1	1	5	Points Only
6th	1	1	1	1	6	1 Year
7th	1	1	1	1	7	Points Only
8th	1	1	1	1	8	1 Year
9th	1	1	1	1	9	Points Only
10th	1	1	1	1	10	1 Year
11th						
12th						
13th						
14th						
15th						
16th						
17th						
18th						
19th						
20th						
21st						
22nd						
23rd						
24th						
25th						
26th						
27th						
28th						
29th						
30th						
31st						
32nd						
33rd						
34th						
35th						
			35	35		
			Place + 1 Point	Place + 1 Point		
			2 Point	2 Point		

Days of Event

Friday 9/10

8:00–7:45pm Registration begins

9:00 pm Welcome Reception
Kick off Event
Explain rules for pairings
Announce MC
Meet Instructors
Describe leadership of the week

Saturday 9/11

7:00 am Coordinators Staff Lunch

7:30–8:30 am Buffet Registration

8:30–9:00 am Rules

9:00–9:30 am Coordinators/Instructors Location of Staff Registers

9:30–10:30 am Buffet Group 1 Pickup at Ribbons

10:30–11:30 am Buffet Group 2 Pickup at Ribbons

11:30–12:30 pm Please Break (FREE) BYO location

12:30–2:30 pm Buffet Food and prize Coordinators at BH

2:30–10:00 pm Cooperation Time Invite at BH

Sunday 9/12

7:30–8:30 am Participant Registration at BH (BH)
8:30–9:00 am Rules
9:00–11:00 am Participant Strength Activities at BH (to 9 BH)
11:00–12:00 pm Participant Break and prize Determination at BH
12:00–1:00 pm Prize Finals Competition Time Offsite at Host BH Wrap

[illegible] [illegible] [illegible] [illegible] [illegible]?

1. [illegible] [illegible] [illegible] [illegible].

2. [illegible] [illegible] [illegible] [illegible]

What Do I Need to do to get Ready?

When you arrive you should be through the following checklist:

1. Check in with front desk staff. They may or may not check you previously in/out.

2. They should point you to the direction of the paperwork, unfortunately there seems to never be a clear path to it and you'll have to ask one of the staff members, otherwise you could possibly be stuck.

3. The first thing you should have a look over, then immediately take the keypad, and the gate should be in front of you. Enter your code and click, hopefully you get a green light and the gate opens for you. If it doesn't, please call the number on the keypad and they will help you. The main exit gate should be on the left as you exit the car park, and again is pretty obvious. Just like in the middle of the other 3 pages in the book it's your knowledge and you can't go wrong.

4. Each companion will begin on a single spot. The people working at [illegible] games need to spend the majority working in the [illegible] the front spot on the [illegible] [illegible] [illegible]

[illegible]

6th Annual
Radwall Mideast Indoor Climbing Competition
ASCF REGIONAL
April 1-2

Open to the Public

To be held at: Miami University, RSC OPC, Oxford, OH 45056 PHONE: (513)529-1567
Limit: 100 competitors of all levels

Starting times: Different for all divisions, they will be given with the confermation letter. Recreational and Intermediate on Saturday, Advanced and Open on Sunday

Divisions: Recreational, Intermediate, Advanced, and Open. Participants will be notified of their division on the day of the competition.

Prizes: Cash awards for Open and gear prizes for other divisions will be given to male and female competitors at the conclusion of their event. Junior/Senior divisions as well as door prizes will also be given away

Schedule of events:

Friday March 31-

5-7:00pm Registration/Event Check-in at the Outdoor Pursuit Center (OPC) or the Recreational Sports Center (RSC)

Saturday April 1-

7:30-8:30am Recreational/Intermediate Registration @ Millstone
8:30-9am Rules
9-9:30am Ascension/Breaching Session
9:30am-4:30pm Rec./Int. Prelim Climbing @ Millstone
4:30-5:30pm Rec./Int. Finals and prize distribution @ RSC

Sunday April 2-

7:30-8:30am Advanced/Open at the OPC @ RSC
8:30-9am Rules
9am-1pm Advanced/Open weight prelims @ RSC
2:30-4:30pm Advanced/Open Finals and Prize distribution @RSC
4-7pm Post event competition free climb @RSC

MOUNTAIN TOOLS
Backpack
OHIO
ARCTERYX
Reebok
VERTICAL ADVENTURES
Radwall
CLIMBING MAGAZINE
Midwest Resole
PETZL
Straight Up
BLACK DIAMOND
YATES
Gramicci
O'Farrell's
CLIF BAR

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Climber's Guide To Oxford

PLACES TO CRASH:

Hueston Woods (camping)	(800) 282-7275
Days Inn	(800) 325-2525
Scottish Inn	(800) 251-1962
[illegible] Motel	(513) 523-1880
College View Motel	(513) 523-6311

FOOD! FOOD! FOOD!

Health Bar/Deli	Rec Center
Bagel & Deli	119 E. High St.
La Bodega	11 W. High St.
Mama Earth's	31 W. High St.
Wendy's	2 S. Main
Bruno's Pizza	11 E. High
Subway	17 E. High
TBCT	31 E. High

Numerous Pubs Uptown Vicinity

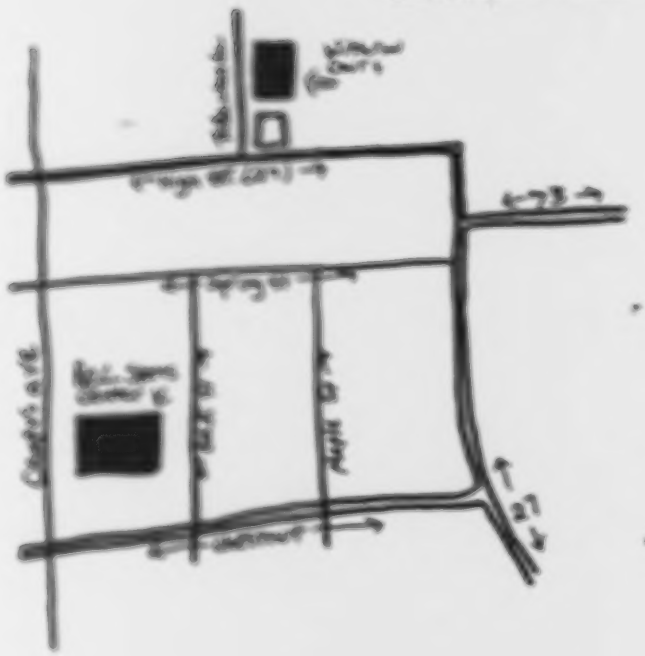
Where Are The Walls?

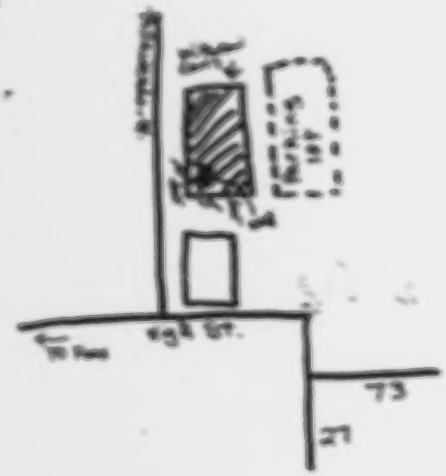
For Recreational and Intermediate climber's prelims: **Withrow Court (Saturday)**
Competitors can park in the lot on the East side of the building or on Tallawanda St.
You can enter the lot from Tallawanda St. South of Withrow Ct.

For Advanced and Open Climber's prelims: **Recreation Sports Center (Sunday)**
Competitors can park in the South and West lots or on Oak St. and Campus Ave.

****If you are not a MIAMI Student and you get a ticket--TOUGH IT, BABY!**

SEE YA AT THE COMP!!!





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6th Annual RADWALL Mideast Indoor Climbing Competition
Official Entry Form

Name:_____Sex:_____
Street address:_____
City:_____State:_____Zip:_____
Home Phone:_____Business Phone:_____

*** Please list an emergency contact below:
Name:_____
Address:_____
City:_____State:_____Zip:_____
Home Phone:_____Business Phone:_____

Divisions are based upon climber's ability level. Event organizers will place climbers in divisions based upon the climber pool. To help us in this process, we ask that you circle the rating which best describes the most difficult up rope climb that you can consistently flash. If you are uncertain about your ability level, please give your best estimate; also feel free to include a note of clarification if you wish.

5.6 5.7 5.8 5.9 5.10a 5.10b 5.10c 5.10d 5.11a 5.11b 5.11c 5.11d 5.12a 5.12b 5.12c 5.12d and up

NOTES:

*Include check or money order made out to *Miami University*
*There is an additional $5.00 fee for those registrations after March 24!!!

Registration Fee- $25 rec,intermediate, advanced:
$35 open : _____

subtract $10.00 if you are currently an ASCF Member: _____

competitor shirt- $5 (limit one): _____

additional shirts - $10 each: _____

**The number of shirts available for purchase on the day of competition will be small.

TOTAL amount included: _____

Event Shirts (indicate appropriate style, size, and number)
Tee: S M L XL number _____
Tank: S M L XL number _____

Send this Information to:

Miami University
Recreational Sports Facility
Mideast Climbing Competition
Oxford, OH 45056

MIDEAST INDOOR CLIMBING COMPETITION

ACKNOWLEDGEMENT, WAIVER, & RELEASE FROM LIABILITY

I acknowledge that a climbing competition is an extreme test of a person's physical and mental limits and that climbing is a potentially dangerous activity with the potential for death, serious injury, and property loss. I HEREBY ASSUME THE RISKS OF PARTICIPATING IN THE RADWALL MIDEAST INDOOR CLIMBING COMPETITION. I certify that I am physically fit, have trained sufficiently for participation in this event, and have not been advised otherwise by a qualified medical person.

In return for allowing me to participate in the RADWALL MIDEAST INDOOR CLIMBING COMPETITION, I hereby take action for myself, my executors, administrators, heirs, next of kin, successors and assigns as follows: A)WAIVE, RELEASE, DISCHARGE, AND AGREE NOT TO SUE, from any and all liability for my death, disability, personal injury, property damage, property theft or action of any kind which may hereafter accrue to me as a result of my participation in, or my traveling to the RADWALL MIDEAST INDOOR CLIMBING COMPETITION, THE FOLLOWING PERSONS OR ENTITIES: The President and Trustees of Miami University, all officials, agents, and employees of Miami University, the event sponsors, the event judges, the event volunteers, and the event participants; B) INDEMNIFY AND HOLD HARMLESS the persons or entities mentioned in this paragraph from any and all liabilities or claims made by other individuals or entities as a result of any of my actions during the RADWALL MIDEAST INDOOR CLIMBING COMPETITION.

I hereby consent to receive treatment in the event of my injury, accident and/or illness during the RADWALL MIDEAST INDOOR CLIMBING COMPETITION.

I understand that at the RADWALL MIDEAST INDOOR CLIMBING COMPETITION, I may be photographed. I agree to allowing my photo, video, or film likeness to be used for any legitimate purpose by the RADWALL MIDEAST INDOOR CLIMBING COMPETITION, the event host, event sponsors, and/or assigns.

I HEREBY CERTIFY THAT I AM EIGHTEEN (18) YEARS OF AGE OR OLDER, I HAVE READ THIS DOCUMENT, AND, I UNDERSTAND ITS CONTENTS.

Printed Name_____ Signature_____ Date____

PARENT/GUARDIAN WAIVER--FOR MINOR

If the applicant is under 18 years of age, the parents or guardian must execute, in addition to the standard waiver above, the following waiver and consent.

The undersigned_____(parent/guardian name) referred to as the parent and natural guardian or legal guardian of _____ (minor's name) does hereby represent that he/she is, in fact, acting in such capacity and agrees to save and hold harmless and indemnify each and all the parties herein named on the front of the form as releases from liability, loss, cost, claim, or damage whatsoever that may be imposed upon said releases because of any defect in or lack of such capacity to so act and release said releases on behalf of both of the undersigned.

Name_____ Signature_____ Date____

CONSENT TO MEDICAL TREATMENT OF MINOR

I hereby authorize any duly authorized doctor, emergency medical technician, hospital or other medical facility to treat said minor for the purpose of attempting to treat or relieve any injuries received by said minor while he/she was a participant or observer at the RADWALL MIDEAST INDOOR CLIMBING COMPETITION.

I authorize any licensed physician to perform any procedure which he/she deems advisable in attempting to treat or relieve any injuries or any related unhealthy conditions of said minor.

I consent to the administration of anesthesia as deemed advisable by any licensed physician.

I realize and appreciate that there is a possibility of complications and unforeseen consequences in any medical treatment, and I assume any such risk on the behalf of myself and said minor. I acknowledge that no warranty is being made as to the results of any treatment.

Parent/Guardian Signature_____
Relationship to Minor_____ Date_____

Emergency Contact person:
Name:_____
Home Phone:_____ Business Phone:_____

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1995 Mideast Comp Prizes!!!

Division	male	female
Open:	1. $400.00	$400.00
	2. $300.00	$300.00
	3. $200.00	$200.00
	4. $100.00	$100.00
	5. Bloodline holds	Bloodline holds
	6. Straight-up holds	Straight-up holds
	7. 1 yr. subs. *Climbing*	1 yr. subs. *Climbing*
	8. Reebok sandals	Reebok sandals
ADV:	1. PMI Rope, Verve tights, Reebok sandals	
	2. 4 BD draws, Mt. Tools ropebag, Reebok sandals	
	3. Speed sling, Enterprise holds, Mt. tools chalk bag, sandals	
INT:	1. BD Genius Pack (Benchmark donation)	BD Genius Pack
	2. Misty Mt. Harness	Petzl Harness
	3. Verve tights, sandals	Verve tights, sandals
REC:	1. La Sportiva Shoes (Vert. Adven. donation)	5.10 shoes
	2. Gramicci pants, sandals	Gramicci pants, sandals
	3. BD chalk bag, sandals	BD chalk bag, sandals

Senior (men's and women's combined):

1. Bolle Sunglasses
2. Gramicci pants
3. Verve chalk bag

Junior (boys and girls combined):

1. Prana pants, locking D w/ pyramid, Gramicci Tee
2. Boreal pack, Gramicci Tee
3. Verve chalk bag

Hardest Boulder problem Prize (TBA)

1. 1 set of Enterprises holds

Door Prizes and Climber Raffle:

TONS O' GEAR!!!

COMPETITION RULES AND REGULATIONS
Recreational & Intermediate Divisions

1. All climbers must wear an approved harness and use the appropriate climbing commands with their belayer. A locking biner attached to the end of the rope by a figure 8 knot will be provided for each climber to clip in to. It is up to the climber to double check the knot and to make sure the biner is locked before climbing. Double check your harness and tie-in with your belayer before each climb. Due to speed considerations, belayers will be provided for each route. Our volunteer belayers have been checked for proper and safe belaying techniques.

2. **There are 6 preliminary routes for REC and ADV competitors. Climbers have an allotted 3 hours to complete all of the climbs. There are to be no "lay-overs". In other words "if you snooze, you lose." Climbers will be randomly divided into two climbing groups to climb during set time blocks. If you are not climbing, you do not have to be present--go have a beer or play pool or something.**

3. Each climber will have a maximum of 3 minutes per route. The clock will start as soon as both feet have left the ground. **THERE ARE NO FREE FALLS. IF YOU FALL ON YOUR OWN* THE CLIMB IS OVER!!!**
*A fall caused by another climber , a spinning hold, or a freakish intervention (such as *Ken Nichols* prying you off a climb), will be disregarded and the climber will be given a new start and a new clock. This is subjective to the judge's discretion and must be addressed at the time of the fall.

4. Climbers must begin a climb with both hands on the starting hold(s) as indicated by markings. This will be specified at the rules reading prior to each climbing time.

5. Scoring is based on the guidelines from the American Sport Climbing Federation (ASCF). You will receive the numerical point for the highest handhold held in control. If you better your position off of the handhold (i.e. readjust your feet, set up for the next move, etc.), you will receive a plus (+) with your numerical score. If you touch <u>but do not hold in control</u> a <u>usable</u> part of a handhold above the controlled handhold, you will receive a plus plus (++) with your numerical score.

Example:

8 - You held the eighth (8) hold in control and did not move from it
8+ - You held the eighth (8) hold in control and make progress off of it
8++ - You held the eighth (8) hold and touched a usable part of any higher hold but did not have it in control.

A route is completed when the furthest (last) hold is controlled and acknowledged by the judge. Verify your score with the judge before initialing the score given. **The score is final and <u>not</u> appealable once you initialize the score.**

6. There will be no points awarded for climbs not attempted. All routes are worth a maximum of 1 point, awarded for a completed climb. If you fall prior to the final hold, a percentage score will be given. For example if there are 10 holds on a route and you reach the 8th hold and fall, a score of 80% or .80 will be awarded. This indicates that the total points possible is 6. Open competitors will be based on a 4 point total scale. All climber's total points will be tallied and the top five climbers in each division will qualify for the finals.

7. Each climber is responsible for their own score card. The score card should be taken to each route. Be ready to climb when your turn comes up and give your score card to the judge for that climb. The judge will review the rules of the route if needed. **All initialized decisions are final.** Take your completed score card to the score-tallying table.

8. We will not stop to clean the holds between climbers during the preliminaries. A tooth brush can be carried and holds cleaned based on climber discretion.

9. Flagging and counter balancing outside the route boundaries is permitted, however, you may not weight the wall or any holds outside the route boundaries. The judges will issue one warning, a second infraction will result in no points for the route.

FINALS MODIFICATIONS

1. New routes will be set for the finals round at the Recreational Sports Center Wall.

2. Finalists will be placed in an isolation room prior to the beginning of the finals round.

3. Finalists will climb only one route on TR. Recreation and Intermediate finalists will have a mass inspection time of 5 minutes to inspect the route. They will then have 5 minutes to complete the route. The clock starts as soon and the climber turns to face the climb.

4. Once a finalist falls, the climb is over.

5. Scoring is the same as in the preliminaries with any ties being broken by going back to the preliminary scores. If there is still a tie a superfinal will be climbed.

Good Luck. Allez!

COMPETITION RULES AND REGULATIONS
Advanced & Open Divisions

1. All climbers must wear an approved harness and use the appropriate climbing commands with their belayer. A locking biner attached to the end of the rope by a figure 8 knot will be provided for each climber to clip in to. It is up to the climber to double check the knot and to make sure the biner is locked before climbing. Double check your harness and tie-in with your belayer before each climb. Due to speed considerations, belayers will be provided for each route. Our volunteer belayers have been checked for proper and safe belaying techniques.

2. **There are 4 onsight preliminary routes. All climbers will remain in isolation until they are to climb. Advanced climbers will attempt 3 TR's and a boulder problem. Open climbers will attempt 2 TR's , a boulder problem, and a lead.**

3. **Each climber will have a maximum of 5 minutes per route.** All routes will be done consecutively, with one five minute rest after the second climb if time allows (determined day of comp.). The clock will start as soon as both feet have left the ground. **THERE ARE NO FREE FALLS. IF YOU FALL ON YOUR OWN* THE CLIMB IS OVER!!!**
*A fall caused by another climber , a spinning hold, or a freakish intervention (such as *Ken Nichols* prying you off a climb), will be disregarded and the climber will be given a new start and a new clock. This is subjective to the judge's discretion and must be addressed at the time of the fall.

4. Climbers must begin a climb with both hands on the starting hold(s) as indicated by markings. This will be specified at the rules reading prior to each climbing time.

5. Scoring is based on the guidelines from the American Sport Climbing Federation (ASCF). You will receive the numerical point for the highest handhold held in control. If you better your position off of the handhold (i.e. readjust your feet, set up for the next move, etc.), you will receive a plus (+) with your numerical score. If you touch <u>but do not hold in control</u> a **<u>usable</u>** part of a handhold above the controlled handhold, you will receive a plus plus (++) with your numerical score.

Example:

8 - You held the eighth (8) hold in control and did not move from it
8+ - You held the eighth (8) hold in control and make progress off of it
8++ - You held the eighth (8) hold and touched a usable part of any higher hold but did not have it in control.

A route is completed when the furthest (last) hold is controlled and acknowledged by the judge. Verify your score with the judge before initialing the score given. **The score is final and <u>not</u> appealable once you initialize the score.**

6. There will be no points awarded for climbs not attempted. All routes are worth a maximum of 1 point, awarded for a completed climb. If you fall prior to the final hold, a percentage score will be given. For example if there are 10 holds on a route and you reach the 8th hold and fall, a score of 80% or .80 will be awarded. This indicates that the total points possible is 6. Open competitors will be based on a 4 point total scale. All climber's total points will be tallied and the top five climbers in each division will qualify for the finals.

7. Each climber is responsible for their own score card. The score card should be taken to each route. Be ready to climb when your turn comes up and give your score card to the judge for that climb. The judge will review the rules of the route if needed (but at the expense of your 5 min. time allotment!). **All initialized decisions are final.** Take your completed score card to the score-tallying table.

8. We will not stop to clean the holds between climbers during the preliminaries (except boulder problem). A tooth brush can be carried and holds cleaned based on climber discretion.

9. Flagging and counter balancing outside the route boundaries is permitted, however, you may not weight the wall or any holds outside the route boundaries. The judges will issue one warning, a second infraction will result in no points for the route.

FINALS MODIFICATIONS

1. New routes will be set for the finals round, which will be **ONSIGHT LEAD, for ADV & OPEN.**

2. Finalists will be placed in an isolation room prior to the beginning of the finals round.

3. Finalists will climb only one route. Recreation and Intermediate finalists will have a mass inspection time of 5 minutes to inspect the route. They will then have 5 minutes to complete the route. The clock starts as soon and the climber turns to face the climb.

Open division finalists will have 3 minutes to preview their route individually when they come out of isolation, and then 5 minutes to complete the climb.

4. Once a finalist falls, the climb is over.

5. Scoring is the same as in the preliminaries with any ties being broken by going back to the preliminary scores. If there is still a tie a superfinal will be climbed.

Good luck. Pull Hard. ALLEZ!

LAST NAME	FIRST NAME	ADRESS		STATE	ZIP
ACKMAN	OLEN	LOGAN		OH	43138
ADAMS	SAM	205A THRASHER PIKE	SODDY-DAISY	TN	37379
ARCARIS	JACQUIELINE	153 PIERCE ST. #5	W. LAFAYETTE	IN	47906
ARNOTT	DIANE	300 E. CHESNUT ST	OXFORD	OH	45056
BARBER	ADAM	19632 YORK RD.	PARKTON	MD	21120
BARODDY	CHRISTIAN	P.O. BOX 21	LINCOLN	VA	22078
BEAN	JON	625 FAIRWAY DR.	TOWSON	MD	21286
BRINCAT	MIKE	9976 PARKLAND DR.	WEXFORD	P	15090
BRINK	MARC	4821 HASSAN CIR. #4	DAYTON	OH	45432
BROCK	ROXANNA	P.O. BOX 733	FAYETTEVILLE	WV	25840
BROOKS	AMY	25 COUNTRY PLACE CT.	ALPHARETTA	GA	30202
BROWN	KATHLEEN	915 BRENTSVILLE RD.	PARIS	KY	40361
BURBACH	MATTHEW	1813 LAKEWOOD DRIVE	ELIZABETHTOWN	KY	42701
BURTON	ALEX	11610 HAZELWOOD RD.	ACHORAGE	KY	40223
BUTSCH	ROB	1919 BONNYCASTLE AVE.	LOUISVILLE	KY	40205
Carnes	Nick	PO BOX 726	PROSPECT	KY	40059
CASSEL	BEN	7584 RAVENWOOD DR.	GREENVILLE	OH	45331
CLAYTOR	CHRIS	2017 CLIPPER PARK DR.	BALTIMORE	MD	21211
COLLENS	BRIAN	201 S. SALISBURY STREET #19	WEST LAYFAYETTE	IN	47906
CRABB	GREG	10702 HOBBS STATION RD	LOUISVILLE	KY	40223
DEWEESE	STEVE	25 COUNTRY PLACE CT.	ALPHARETTA	GA	30202
DIEHL	KEVIN	6503 SHAFFER RD.	WARREN	OH	44481
DINKINS	TIM	822 CHEROKEE RD.	LOUISVILLE	KY	40204
DITTO	BEN	7338 VALLEY LN.	HIXSON	TN	37343
FISHER	J.D.	1107 WINTERTON ST.	PITTSBURGH	PA	15206
FISHER	DALE	1301 CHELTON DR.	KENT	OH	44240
GAGNON	NADINE	7192 IMPASSE DE L'EAU-VIVE	ANJOU, QUEBEC	CANADA	H1J2V4
GARBER	LARRY	1765 W. 635 N.	HOWE	IN	46746
GOLDEY	CAYLIN	6278 MORNING SUN RD.	OXFORD	OH	45056
HACKMAN	JENNIFER	3489 LANSDOWNE DR. #45	LEXINGTON	KY	40517
HAMBLIN	MATT	1484 ECHO TRAIL	LAWRENCEBURG	IN	47025
HARP	JOSH	1672 WOODBLUFF DR.	POWELL	OH	43065
HELLMICH	NICK	603 OAK BRANCH RD.	LOUSVILLE	KY	40245
HJORT	NICK	100 N. RIVER RD. #224	W. LAFFAYETTE	IN	47900
HOLMES	RICK	7056 ROYALGREEN DR.	CINCINNATI	OH	45214
HORVATH	JASON	1308 HEPBURN AVE.	LOUISVILLE	KY	40204
HOUDEN	RON	RR #1	ORENGENILLO, ONTAR	CANADA	L9W248
HOUGH	BRUCE	11607 WETHERBY	LOUISVILLE	KY	40243
HUME	DAVID	3445 BELVOIR DR.	LEXINGTON	KY	40502
HUME	JACK	3445 BELVOIR DR.	LEXINGTON	KY	40502
JACKSON	DOUG	1047 FAIRFIELD RD	TROY	OH	45373-1727
JEAN	ED	1270 TOLLYWOOD DR.	FAIRFIELD	OH	45014
JOHNSTON	GREGORY	621 E. 8TH ST.	TARENTUM	PA	15084
KELTNER	DAVE	355 MORRIS HALL	OXFORD	OH	45056
KEYZER-ANDRE	RENE	548 1/2 E. PEARL ST.	MIAMISBURG	OH	45342
KING	C.J.	218 HEPBURN HALL, MIAMI U	OXFORD	OH	45056
KING	PAULA	24-A WANNEN RD.	BUMFIELD	MA	1010
KOWELL	KATHY	4331 PHILNOLL DR.	CINCINNATI	OH	45247
KUHEL	DAVID	321 N. COLLEGE	OXFORD	OH	45056
LEE	PAGE	4606 DAVIDSON DR.	CHEVYCHASE	MD	20815
LINE	MICHELLE	947 N. PENNSYLVANIA	INDIANAPOLIS	IN	46204
LONGCAMP	KYLE	200 E. HIGH ST.	OXFORD,	OH	45056
LOVELL	JULIE	21844 FLANDERS DR.	FARMINGTON HILLS	MI	48335
LUCAS	JUSTIN	1270 TOLLYWOOD DR.	FAIRFIELD	OH	45014
LUTHER	JOHN	5287 ALGER RD.	RICHFIELD	OH	44286
LYNCH	CHRIS	532 S. LINCOLN	KENT	OH	44240
MACEACHERN	TRACY	518-C S. RANDOLPH COURT	PHILADELPHIA	PA	19147
Marfori	michele	639 W. CHESNUT ST.	OXFORD	OH	45056
MARSH	ROBERT	843-12 IDEAL WAY	CHARLOTTE	NC	28203
MARTINEZ	STEPHEN	811 ADDY RD.	COLUMBUS	OH	43214
MARTINEZ	MARGARITA	548 1/2 E. PEARL ST.	MAIMISBURG	OH	45342
MATTSON	MATHEW	42 DONALD DR.	HASTINGS-ON-HUDSON	NY	10706
MATYS	KENNY	497 INDIAN RD.	DURYNGTON	ONTARIO	L7T3T6
McCORD	TRAVIS	3601 RIVER BLUFF RD.	PROSPECT	KY	40059
McINTYRE	TAIGE	3155 JOHNS-UTICA RD.	JOHNSTOWN	OH	43031
McNEAR	BRAD	2633 ASTRO CT.	FAIRFIELD	OH	45014
MILLEN	SCOTT	1 CUSHING AVE. #2	KETTERING	OH	45429
MILLER	JIM	3420 SENECA ST.	BALTIMORE	MD	21211
MILLER	LYNNETTE	548 1/2 PEARL ST.	MIAMISBURG	OH	45342
MILLER	GEORGE	64 HAYS ST.	VALENCIA	PA	16004
MILLER	AILEEN	64 HAYS ST.	VALENCIA	PA	16004
MINTURN	CHARLES	10047 WIMBLEDON CT.	CINCINNATI	OH	15242
MINTURN	JOHN	10047 WIMBLEDON CT.	CINCINNATI	OH	15242
MINTURN	TOM	10047 WIMBLEDON CT.	CINCINNATI	OH	15242
MOELLER	MATHEW	714 S. LOCUST	OXFORD	OH	45056
MORFORD	WAYNE	RSC	OXFORD	OH	45056
NIEMIEC	CRISTIN	37820 RHONSWOOD DR.	NORTHVILLE	MI	48167

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OPPENHEIM	DANIEL	6689 WOODWELL ST.	PITTSBURGH	PA	15217
OPPENHEIM	IRVING	6689 WOODWELL ST.	PITTSBURGH	PA	15217
PADGETT	ANTHONY	3420 HOAGLAND BLACKSTUB R	CORLAND	OH	44410
PINKSTON	ERIC	CARY QUAD SWB357	W. LAFAYETTE	IN	47906
POSTLE	FRANK	913 WILLOWDALE AVE.	KETTERING	OH	45429
PRICE	JASON	735 UNIVERSITY AVE.	SWANNEE	TN	37383
RAACK	DAVID	301 2ND ST.	FINDLAY	OH	45840
REASER	JEFFREY	1511 TEEWAY DR.	COLUMBUS	OH	43220
RENNAK	SCOTT	112 W. WOODNUT AVE. #4	COLUMBUS	OH	43210
ROBERTSON	JOSH		LOUISVILLE	KY	40204
ROCCOS	CARRIE	696 POLO DR. N	COLUMBUS	OH	43229
SALAS	JORDI	112 HOGARTH CIRCLE	COCKEYSVILLE	MD	21030
SHANK	BYRON	1225 E. 100 S.	LAGRANGE	IN	46761
SPYDER		408 WALL AVE.	PITCAIRN	PA	15140
STRACHAN	BILL	11829 STONE MILL RD.	CINCINNATI	OH	45251
SUBLETT	TOBEY	960 STAGECOACH RD.	LAGRANGE	KY	40031
SWAN	NORMAN	1115 PORTAGE EASTERLY	CORTLAND	OH	44410
SWAN	ANDREW	1115 PORTAGE EASTERLY	CORTLAND	OH	44410
THOMPSON	KEN	347 HARROGATE CT.	WESTERVILLE	OH	43082
THOMPSON	RUTH	347 NARROGATE CT.	WESTERVILLE	OH	43082
WAHL	TODD	3411 BARBOUR RD.	LOUISVILLE	KY	40241
WATERS	BEN	701 OAK ST. #236	OXFORD	OH	45056
WILSON	JON	9710 TUSCULUM WAY	BETHESDA	MD	20817
WOOD	STEPHAN	270 W. FOUNTAIN AVE	DULANARA	OH	43015
ZIMOV	JENNIFER	548 1/2 E. PEARL ST	MIAMISBURG	OH	45342

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Re-Establishing a Clean Climbing Ethic

By

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Department of Physical Education
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Raleigh, NC 27695-8111

Abstract

This paper focuses on the impact issues currently being faced by the adventure sport of rock climbing. Emphasis is placed on re-establishing a clean climbing ethic through a variety of strategies, climber education, and ethical considerations.

Introduction

The adventure sport of rock climbing has grown considerably over the last decade. The American Alpine Club estimates that there are over 200,000 rock climbers in the United States who climb 10 days or more each year (Williamson, 1992). According to Davidson (1992) "virtually every climbing area has experienced a tremendous increase in climber visitation as confirmed by land managers across the country" (pg. 50). For example, climbing routes in Yosemite have increased from 500 routes in 1970 to over 3,000 in 1992 (Marshall, 1992)!

In addition to various social and economic factors the growth and popularity of rock climbing can be traced to four distinct eras (Figure 1.). The first era (1930-1960), *Exploration*, focused on the introduction of modern climbing techniques, first ascents, the development of technical rock equipment, and big wall climbing. The *Environmental* movement (1960-1970s) ushered in the concept and practice of clean climbing; climbing and leaving no trace of one's ascent. Protection devices including stoppers and hexcentrics were introduced by Chouinard Equipment, and the Lowe Cam (the first SLCD) appeared on the market. Exploration was followed by a period of *Innovation* (1970-1980s). During this era, the Friend was developed by Ray Jardine, and "sticky" boot rubber was introduced. The mid 1980s-1990s witnessed a climbing *Explosion*. Technology made the sport more visible and accessible. Artificial climbing walls, sport climbing, and the use of portable battery operated drills have introduced climbing to the masses opening areas which until a few years ago were thought to be unclimbable.

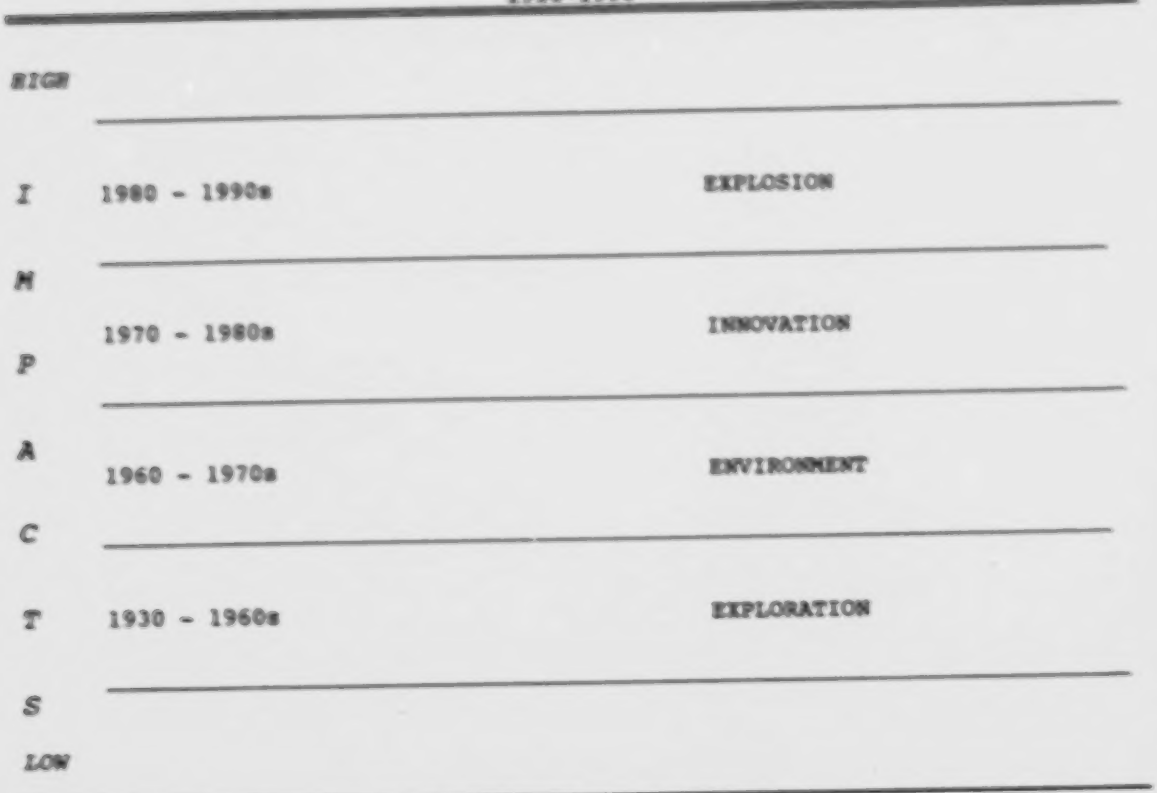
As we enter the 21st century it seems as though the climbing community has come full circle. Climbers are again exploring new areas, introducing new equipment and technology much like the early pioneers of the sport. This time around however, climbers are being confronted with crowded climbing areas, conflicts with other visitors, access and liability issues, and image problems.

Until recently, the sport has gone unregulated, However, with the increasing number of climbers visiting these areas a greater demand is being placed on the climbing resource. As a result, the potential for environmental damage and degradation of the recreation experience has become more visible. This has led to our present dilemma: How to integrate the growth of climbing with the requirements of preserving and administering public and private lands. Pritchard (in Kuss, Grafke, & Vaske, 1990) described this management concern:

"The challenge facing most park managers today is no longer how to attract visitors, but how to preserve park resources and quality visitor experiences ..... Visitor overuse and abuse of this nation's natural and cultural heritage has become one of the most widespread land management concerns" (pg. iii).

Figure 1. The Evolution of Modern Rock Climbing

1930-1990



To address these concerns, land managers throughout the country are currently in the process of scrutinizing climbing practices and in some areas implementing policies that may compromise the future of rock climbing (Davidson, 1992). With all of these concerns, impending regulations, and problems; it's time to re-establish a new clean climbing ethic, one that embraces the historical roots of the sport; adventure, challenge, independence, and respect for the vertical environment. The climbing community needs to become more "in tune" with the environment, become stewards of the land and take care of it. We need to educate and ourselves and others on how to climb cleanly, minimize our impact and leave no trace. . . .

The Impacts

Resource managers nationwide have identified numerous environmental and social impacts related to climbing activity. Environmental impacts are those impacts that change or alter the physical or biological characteristics of an area, whereas social impacts result in a negative recreation experience due to

the behavior or conduct of others (Hendee, Stankey, & Lucas, 1990). Common impacts include soil compaction and erosion, development of multiple trails, damage to vegetation both on and off the rock face, improper disposal of human waste, and disturbances to wildlife. Visual impacts to the rock and its environs, the use of fixed anchors (bolts), potential damage to historical and cultural sites, and negative recreation experiences by other visitors have also been identified as concerns. It should be noted that these impacts are based on observations by resource managers and not on empirical evidence (Attarian, 1992).

Clean Climbing

Clean climbing should be more than just placing protection that doesn't damage the rock; it's an idea that promotes stewardship and appreciation towards the vertical world and the surrounding environment. Clean climbing should reflect concern for both the social and natural environment and introduce practices and techniques that encourage responsible climbing.

The concept of clean climbing is not a new idea. In the 1972 Chouinard Equipment catalog, Yvon Chouinard and Tom Frost introduced the idea of clean climbing for the first time. This new approach to climbing was in response to the increase in climbing activity, advances in techniques, and improvement in equipment. The combination of these variables was beginning to compromise the sport. Chouinard and Frost recognized the new direction that the sport was heading and noted:

> "Armed with evermore gadgetry and techniques the style of technical rock climbing is gradually becoming so degraded that the elements vital to the climbing experience; adventure and appreciation of the mountain environment are being submerged. . . . We believe the only way to ensure the climbing experience for ourselves and future generations is to preserve the vertical wilderness and the adventure inherent in the experience. Really the only insurance to guarantee this adventure and maintain it is exercise of moral restraint and individual responsibility" (pg. 1).

Also during the 1970s the Leave No Trace program (LNT) was initiated by the Forest Service in response to the popularity of backcountry use and the impacts associated with it. This program has since been revitalized and reintroduced on a more visible scale by the National Outdoor Leadership School (NOLS) and Federal land management agencies (1993). LNT is based on six principles: (1) plan ahead and prepare; (2) camp and travel on durable surfaces; (3) pact it in , pack it out; (4) properly dispose of what you can't pack out; (5) leave what you find; and (6) minimize use and impact from fires. Clean climbing embraces these principles and others unique to the sport of rock climbing. Each of these practices have been introduced by climbers, land managers, and grass root climbing organizations across the country to minimize impacts and enhance the recreation experience (Table 1.).

Strategies

When introducing minimal impact techniques, Simpson (1993) suggested that the reasons for each technique or practice be explained to participants in order to heighten the chance for compliance. Once skills have been taught, decision-making should be relinquished to the participants allowing them the opportunity to gain a better understanding of the principles and practices introduced.

A variety of strategies can be used to help teach and reinforce the principles and practices of clean climbing. To meet these objectives, the

instructor or leader's job is threefold: (1) help participants recognize the broader implications of their climbing experience, (2) encourage each individual to act responsibly by emphasizing to them the importance of clean climbing, and (3) help them understand the need to establish a set of personal environmental standards they can use later in life (Simpson, 1993; Drury and Bonney, 1992). The following approaches to this process include: role modeling, education, teachable moments, and service.

Table 1. Techniques and Practices to Minimize Climber Related Impacts

Impact	Technique/Practice
Soil/Vegetation	· Use resistant surfaces to access or descend climbs · Use existing trails to access areas · Shortcutting causes erosion · Avoid damage to vegetation whenever possible · Use webbing around trees for rappel anchors
Fixed Protection	· Self-regulation among climbers · Limit the placement of bolts to specific areas · Peer-review process re: new routes · Paint bolts to match rock color · Ban or limit portable electric drills
Chalk Use	· Prohibit or minimize use · Encourage earth tone colored chalks · Continue use with education · Volunteer clean-up of rock surfaces · Clean route on rappel
Wildlife	· Respect seasonal closures · Be aware of critical habitats and avoid
Waste Disposal	· Dispose waste properly · Use containers (bags) for waste disposal (pack it out) · Use existing latrines/privies · Pay attention to local regulations · Learn how to construct and use a "cathole"
Visual Impacts	· Use natural colored webbing for belay and rappel anchors, etc. · Install cold shunts for permanent belay/rappel anchors · Avoid climbing within 50' of cultural or historical resources · Wear earth-tone colored clothing

1. Role Modeling

Outdoor leaders should present themselves as good role models by striving to maintain environmentally sound practices throughout the climbing experience. Role modeling by outdoor leaders and guides has been shown to be an effective way of changing resource behavior, especially in river environments, campgrounds, and backpacking areas (Wagstaff & Wilson, 1987; Cockrell, Bange & Roggenbuck, 1984; Oliver, Roggenbuck, & Watson, 1984). Similar behavior may also be effective for climbing environments. In this "practice what you preach" approach, the instructor leads by explaining the concepts of clean climbing to heighten the participant's awareness. This is followed by the instructor modeling the appropriate behavior and techniques, and leading through example. For instance, using natural colored webbing, respecting area closures, following local rules and regulations, accessing climbs via trails, or depositing waste properly. Once students begin to see and understand the practices presented, they may change their patterns of behavior (Wagar, 1976).

2. Education

The use of education and information has been identified as a successful method for minimizing the impacts associated with recreation in natural environments (Roggenbuck & Ham, 1986). However, in order for education and information programs to be effective they must be well organized and contain a variety of communication techniques to reinforce intended messages; for example, slide and video presentations and ranger contacts (Kascenska, 1987).

Outdoor programs and courses can be important venues for disseminating information and educating aspiring rock climbers on the virtues of clean climbing. Education programs that incorporate a hands on approach to teaching minimal impact techniques are generally viewed as having the greatest potential for influencing appropriate behavior (Roggenbuck, 1992). For example, the rock climbing program at North Carolina State University includes a unit on minimal impact rock climbing and uses a combination lecture and slide program to visually identify climber related impacts, discuss the implications, management practices, and introduce effective clean climbing practices. This information is reinforced during climing outings where students can implement the appropriate clean climbing practices.

3. Teachable Moments

Outdoor leaders can utilize the occasional occurance of unplanned opportunities or circumstances to present topics and reinforce clean climbing practices when presented with them. These events allow participants to explore specific issues and meet them head on. For example, your group arrives at the base of a climbing area to discover the rockface above crowded with climbers with more waiting to get started. As a teachable moment, a discussion might ensue on the issues surrounding crowding; what are the social and environmental impacts involved; how does this encounter affect your climbing experience; or what are some of the ways of reducing this type of encounter?

4. Service

Engaging in activities that promote service to the climbing environment can supplement classroom lectures and outings by encouraging students to participate in local projects to reinforce practices and attitudes developed earlier in the program or course. Climbing area clean-ups, trail maintenance projects, participation in local climbing coalitions, special events, or involvement in access issues are all ways of getting involved and giving something back to the vertical environment.

Conclusion

As outdoor educators we can provide our participants with the experiences to help them become more knowledgeable climbers and outdoorpersons. Participation in our programs can give all of us the oppportunity for fun, excitement, adventure, and challenge, Perhaps most of all, the climbing experience offers us a chance to explore and shape our attitudes towards the vertical environment and ourselves and act responsibly on its behalf.

> "Rock climbing, as such, should be accepted with the greatest enthusiasm; yet I feel that certain values should be preserved in our contact with the mountains. While it is rarely a case of the complete ascendancy of acrobatics over esthetics, we should bear in mind that the mountains are more to us than a mere proving ground of strength and alert skill. Rock climbing should be considered a thrilling means to a more important end."
>
> Ansel Easton Adams, 1932

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THE ROLE OF TACIT KNOWLEDGE IN JUDGEMENT AND DECISION MAKING

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ABSTRACT:

The literature on judgement and decision making for outdoor leaders presents a rule-based logical model of decision making and judgement emulating the logical model of a computer. Such a model presupposes that computers "think" in the way we do (or ought to do).

This presentation disagrees with the computer-based model of human thinking. It discusses a concept called "tacit knowledge" and its vital role in judgement and decision making. The concept of tacit knowledge better explains the decision making process of human beings. Those who understand tacit knowledge will have a far better understanding of judgement and decision making, and the teaching of leadership and judgement.

AUTHOR'S NOTE:

The actual presentation involved a 20 minute introduction to two models of judgement and decision-making (J/DM) and to the concept of tacit knowledge, then followed with 40 minutes of discussion, questions, and answers as the audience grappled with the concept and its application. The following "outline" highlights most of the key points that were brought out during the discussion. A few points and examples are added. Several are omitted.

WHAT IS TACIT KNOWLEDGE?

- "Tacit knowledge" is a term developed by a Michael Polanyi, who was both a scientist and a philosopher of science. His major work on the topic was published in 1958.

  A major thrust of his work was to demonstrate/ explain that the "objective" knowledge of science was based upon a bedrock of "tacit knowledge."

- Tacit knowledge is a form of knowledge.

  -- That is, it has the status of certainty that other forms of knowledge have.

  -- It is to be distinguished from intuition, gut feelings, or mere personal opinion.

  -- It is <u>not</u> "subjective." It is not based upon a person's "whim."

- As <u>tacit</u>, it is generally unarticulated, and if you attempt to articulate it, it is difficult to express or explain.

  -- Consequently, it may be difficult to recognize as a legitimate form of knowledge (that it is not something "subjective").

- Because it is difficult to articulate, it is easier to explain through example.

-- An example Polanyi used is that of the medical doctor reading an x-ray. In certain x-rays, the doctor will quite easily see the broken neck, whereas the untrained lay person will be unable to see it.

-- In fact, even if the doctor takes the time to attempt to show the lay person the signs indicating the break, the lay person may still be unable to see clearly that there is a break.

-- Other examples include the professional winetaster with the highly developed sense of taste (and smell) or the professional chemist with a sensitive nose.

-- In all these cases, the trained professional can readily distinguish differences and make judgements about what they perceive ("the neck is broken," " this wine is an excellent [or sour] example of x," " this chemical is clearly y."),

-- In contrast, the untrained lay person will be unable to "understand" the "reasons" behind those judgements.

-- However, with appropriate training and through a appropriate guidance, the lay person can learn to perceive what the professional perceives and make appropriate judgements.

- Examples in the outdoor recreation field include the ability to:

a) "read" a whitewater river;
b) see or diagnose a difficulty in learning to ski (or paddle, or climb, etc.);
c) recognize the conditions for, and the earliest subtle signs of, hypothermia;
d) recognize this is a situation in which hypothermia could readily occur;
e) follow an overgrown, unused trail;
e) judge whether a given student has sufficient maturity or ability to lead a group, or to go off on their own.

- Tacit knowledge is acquired primarily through experience, generally acquired through working with other experienced, "qualified" or professional persons.

-- That is, it is learned primarily through the examination or observation of many examples (accompanied by periodic reflection), under the tutelage of teachers, mentors, or other professionals.

-- Polanyi also called it "practical knowledge." By use of the word "practical," he did not mean "useful;" he meant knowledge derived from practice. In Polanyi's context, practical knowledge is knowledge derived through experience and practice.

- It often functions pre-consciously.

-- As pre-conscious, it functions at a level of consciousness prior to one's becoming conscious of it. As pre-conscious, it can fairly easily be brought to the level of consciousness, but it frequently is not necessary nor done so.

-- That which is known through tacit knowledge might be described as "taken-for-granted." Again, as taken-for-granted, it is accepted as known without much thought given to how or why one knows it.

- Let's look at some more examples:

-- You are cross-country skiing on a snow-covered trail with a bunch of beginning leaders. As you follow the trail, you look for the subtle signs indicating the trail. You look for old blazes, for unnaturally

straight breaks in the trees, for logs or branches which have been sawed off, for a depression in the snow.

You find that you are following the trail, with difficulty perhaps, but nevertheless you know you are on the trail. Yet your students are confused. They do not see the signs which you see, and they are skeptical you know what your doing. As you were following the trail, you may or may not have been consciously looking for the various signs. However, if you were not, once your students start questioning you, you will likely become more conscious of what you're looking for. You could then point out the signs to students. Some of your students will say "Oh, I can see some"; some will be unable to see, despite their best efforts, and will remain skeptical.

The knowledge you have of following the trail is tacit knowledge. It has been acquired through experience, possibly with a mentor showing you the signs. This knowledge is not acquired easily, not through books alone, and can only be acquired through considerable practice.

- Here's a second example.

At one time I was a Certification Examiner in Nordic (cross-country) Skiing for the North-West Region of the Professional Ski Instructors of America. At that time there were four levels: Candidates, Associate Certified, Full Certified, and Examiners. At a certification exam, there would be 3 examiners plus back-up apprentice examiners. As an examiner, and as a person who had gone through the full process from Candidate Instructor to Examiner, I was able to make number of observations which focussed around what I later realized was tacit knowledge. They are these:

a) It was remarkable how consistent the three examiners were in being able to judge whether an examinee was skiing at a No-pass level, at the Associate level, or at the Full-Cert level. A few of the examinees were skiing at a borderline level between No-pass and Associate, others were clearly skiing at one of the three ability levels. For the most part, we were in agreement in our judgements.

b) Those who did not pass to the Associate level frequently could not understand why they did not pass.

c) Associate level candidates could not distinguish between Associate level and Full-Cert levels of skiing.

d) As examiners we had strengths and weaknesses. Some of us were better at track skiing, others were better at telemark or parallel skiing. Regardless, Associate level or even Full-Cert level candidates could not distinguish skill differences among us.

e) As a Nordic Examiner, I was given the opportunity to attend Alpine (downhill) certification exams as a guest back-up examiner. What was really intriguing was that in Alpine skiing, I was <u>unable</u> to distinguish the difference between No-Pass candidates and Associate level alpine candidates, even though I had no difficulty distinguishing No-Pass and Associate level nordic candidates.

f) Thus, in nordic skiing I (and other examiners) had the ability to distinguish levels of skiing, but only the highest candidates shared this ability. However, in alpine skiing I did not have this ability. In nordic skiing I had acquired the tacit knowledge, but in alpine I had not.

- Examples of tacit knowledge may be either: a) perceptual, or b) a skill or practice (or a combination of perception and skill).

It involves either:

a) the ability to do-- knowing how to do something well, or "how to" knowledge

b) the ability to perceive-- the knowledge is obvious to any trained person. They can know by the immediate sight or by the sound, smell, or touch that something is the case; and this would not be obvious to the untrained person.

- It also generally requires a background of knowledge or a theoretical (conceptual) framework as a context for understanding.

As a form of knowledge, reasons for decisions or judgements based upon tacit knowledge can be articulated.

-- That is, if one brings it to the level of consciousness and thinks about it, one can articulate reasons to explain a decision based on tacit knowledge.

-- Other persons with a similar background of experience and knowledge will understand the reasoning.

However, <u>such reasons may not make sense to the person who does not have a sufficient background</u> of knowledge and experience.

- Generally, when discussing a situation related to tacit knowledge, fellow professionals do not need to articulate that which is tacitly known. Tacit knowledge is a given, a building block upon which to make other, more conscious or deliberate, decisions.

- That other professionals, given a similar background of experiences and theoretical framework, can understand and accept decisions based upon tacit knowledge is a characteristic separating tacit knowledge from the realm of "subjectivity" or "intuition."

Because tacit knowledge often functions preconsciously, it may be confused with intuition. But unlike decisions based upon intuitions, if pressed and appropriately trained, the person making decisions based on tacit knowledge can clarify the grounds upon which the decision is made. An appropriately trained person can make conscious, can point out, those features which were being observed or were functioning pre-consciously.

Tacit knowledge is "objective" because other similarly trained professionals can arrive at similar observations and make similar decisions based upon their observations. Being unable to make similar observations, an untrained person may think the professional is acting upon "intuition" or is being "subjective."

- That there is tacit knowledge may also be a form of tacit knowledge.

-- That is, it is typically not recognized as a form of knowledge, and only those with sufficient experience and the background of a conceptual (theoretical) framework will understand the concept.

-- Furthermore, the concept of tacit knowledge is best explained, understood, through the use of appropriate examples explicated with appropriate tutelage.

TWO TRADITIONAL MODELS OF JUDGEMENT AND DECISION-MAKING

- In the literature on judgement and decision-making (J/DM), there are two models of J/D-M which are fairly well known. One is the Wilderness Education

(WEA) Model (Cain, 1991); the other is the Priest model (Priest, 1988; Priest & Dixon, 1990).

- The WEA model. In the WEA model, the leader recognizes a need to make a decision, collects all available relevant information, identifies and analyzes potential options for actions, and identifies consequences of those actions. Then the leader (or the group) selects an option. The option is executed and the results are evaluated.

  There are some significant shortcomings in this model. It does not explain how a leader observes and knows there is a need to act and makes a decision to act. It does not explain how a leader knows what are appropriate potential options to consider nor knows the appropriate potential consequences. It does not explain how a leader knows the most appropriate options, nor does it explain how a leader knows which is the best decision.

  In sum, in the world of all possibilities and perceptions, the model requires selection of the appropriate possibilities and perceptions and requires rejection without consideration of a large (perhaps infinite) number of possibilities. This model does not explain how a leader pre-consciously does these things.

- The Priest model. In the Priest model, human J/DM is compared to a computer. Both humans and computers are said to process information in the same way. In this model, "judgement is a series of procedures undertaken by the human brain in an effort to fill in for information that is uncertain, but nonetheless important to the problem-solving process" (Priest & Dixon, p. 28).

  The way judgement and decision-making works is that, when faced with a question, the human computer retrieves appropriate general concepts derived from experience and inductive reflection, uses judgement to fill in gaps as necessary, applies logical deductive rules to these concepts, and generates a judgement. This judgement is modified as necessary using the same procedure.

  The standard computer today is the digital computer. Computer programmers program their computers using what is called "two-valued" logic. Two-valued logic involves a series of step by step questions, to which each answer is either yes or no. It follows basic rules of deductive logic. Under this computer-based model of human judgement and decision-making, judgement provides the necessary information for the deductive logic of the human computer to work, and a judgement is the output or the conclusion. However, ultimately, a computer model of judgement requires that the complex realities of the world be reduced to a series of simplified yes-no answers. [See footnote 1.]

  As with the WEA model, the Priest model requires that a person make decisions about and has to know (decide, judge) what are the appropriate general concepts, and a person has to know (decide, judge) which information in the current situation is appropriate. Thus under this model, before the proper judgements can be deduced, judgements have to be made. As with the WEA model, what is the basis for knowing these prior judgements?

  Ultimately, the problem is that arriving at logical conclusions is much simpler in a computer than in the real world, for in the real world the appropriate logical conclusion depends upon what data is chosen to put into the logical mix. The decisions regarding which data to use is based on something other than deductive logical rules.

- Despite these shortcomings, those models of decision-making can be useful in certain limited situations, namely those situations in which the leader has the luxury of the time to brainstorm options and make conscious, deliberate decisions. The WEA model can also be used as a structured method for teachining tacit knowledge and judgement.

- But the WEA model does not describe how we make judgements, and either of these models can be used only for a relatively small number of the decisions a leader must make.

  As we know, many accidents are the result of an accumulation of small mistakes or errors in judgement. Many of these mistakes are made unconsciously-- they are not intended. Further, incidents often may result from decisions <u>not</u> made.

  In part this happens because leaders are not only making decisions from the moment they wake up, but they are making decisions even before they go on the trip. Some accidents (such as those involving hypothermia) are set in motion with the decisions (or non-decisions) regarding what clothing or equipment to bring or the objective of the excursion.

- Good judgement, then, is based upon an innumerable number of conscious and pre-conscious decisions which are made on an on-going basis. It is not explained by the two popular decision-making models just described.

  An model of J/DM which uses the concept of tacit knowledge has much greater explanatory power.

JUDGEMENT AND DECISION MAKING

- Standard models of judgement and decision making (J/DM) start with experienced leaders recognizing or knowing there is a problem and then thinking through sequential steps to arrive at an appropriate decision.

- There are three significant situations for which the traditional models of judgement and decision-making (J/DM) do not account. They don't explain the following:

  1) <u>Experienced leaders</u> are far better able to read subtle signs than are inexperienced leaders; and further, <u>are far better able to recognize and know there is a problem, or impending problem</u>, than are inexperienced leaders. For examples:

     a) An experienced leader knows that a given situation is very conducive to hypothermia; the experienced leader knows through body language that a certain individual is cold, and knows through experience that too often the leader needs to actively intervene to get cold persons to put on clothing. A leader with "good judgement" will intervene early; the inexperienced leader will too often ignore the signs until they can no longer be ignored.

     b) You are cross-country skiing out in the woods in the afternoon. You come across a skier who has taken a fall and is writhing in pain. The two companions of the skier are not experienced in the outdoors, do not have sufficient clothing for being inactive, do they have any emergency equipment, and do not know what to do. You see that the lower leg is unnaturally bent just above the top of the boot. If you have seen enough similar situations, you immediately know that the leg is broken. (You also have been trained not to diagnose, but nevertheless there is no doubt in your mind.)

        You also immediately know there are a number of concerns which will need to be dealt with. In addition to the standard first aid textbook items, you know that hypothermia and shock are a serious concern; you know that at some point you will need to send for help, or get it yourself; you know that you will need to be concerned with yourself (do you have clothing and equipment to stop and assist?); and you know you have to deal with the uninjured persons and your own group, if you are with one. It is very cold out, days are short, and

there is not a lot of time before the sun disappears behind the trees.

In this second problem, there are a number of significant concerns that need to be addressed. These concerns, and others, will immediately spring into the mind of the experienced leader and be recognized as problems to be dealt with.

2) Experienced leaders often immediately know (without thinking) appropriate actions and solutions, whereas beginners would not.

3) Throughout the day, experienced leaders make numerous routine decisions (judgements) without consciously recognizing a problem and then thinking through to a solution. For example, experienced leaders routinely:

   a) decide to get up in the morning, put their clothes on, eat (or not eat) breakfast); decide what to eat, how much to eat, whether to air out their sleeping bag, etc; decide when they have had enough breakfast, decide when to start packing for the day, decide whether to visit the toilet, etc.

   b) bring certain items of clothing and certain equipment on trips (the Ten Essentials, other);

   c) check the sky for changes in the weather, and make judgements concerning the weather and whether it's stable or changing;

   d) check the map and the time to know where they are and the progress they are making; judge that they are making good time or slow time;

   e) monitor the group to see how they are doing physically and psychologically, whether they are eating and drinking, whether they are properly dressed, etc.; make observations and judgments about people and those issues;

   f) decide to take rest breaks and meal breaks; decide to make a decision regarding when to take those breaks, or decide to seek input from others, etc.

   g) plus hundreds of other routine decisions.

4) Prior to the excursion, the leader will have made innumerable decisions, some of which have important effects on decisions made during the trip and on the advent of an accident or incident. These decisions also are made without the brainstorming-and-thinking-to-a-logical-decision process of the standard models.

- The sorts of "decisions" and "judgements" indicated by 3 and 4 above are not really consciously determined decisions and judgements-- rather many are just standard operating procedure or habit.

  Most of the decisions indicated in 3 and 4 are not really decisions. That is, they are not fully consciously made; the leader does not think through the consequences before making the decision. At best they are quasi-decisions, or they could be called "pre-conscious" decisions. The judgements, also, are often pre-consciously or habitually made.

  Nevertheless, these quasi-decisions and judgements are necessary and unavoidable, and some have significant consequences.

- There seems to be a tendency to think that good judgement is exhibited (or has failed) only when there an immediate need for a good decision. Examples in the literature are usually instances where the leader is compelled to make a g d (sound) decision or else something dire will happen.

For example, Miles (1987) defined judgement to be "the making of a decision when faced with a potentially hazardous or risky situation" (p. 503). He used the example of a mountaineering group on a glaciated mountain having to make a decision whether to continue in the face of the impending storm.

Or Priest (1988) used the examples of how to pass a car and how to evacuate an injury, both of which were potentially hazardous situations in his scenarios.

- In fact, when you think about the large number of decisions made, and not made, prior to a "hazardous situation," you realize that the traditional models are appropriate for only a relatively few J/DM situations.

- An appropriate model of sound judgement needs to take into account the myriad number of decisions and judgements, non-decisions, and quasi-decisions the experienced leader makes on an ongoing basis both during and prior to the excursion or the hazardous situation.

- There are two elements crucial for sound judgement. One is tacit knowledge.

- Another crucial element is habit, or routine practices.

  -- We do not make decisions for everything we do. We do not mentally run through a sequence of steps to make decisions to do things.

  -- Instead we rely upon habits for much of what we do. A leader with sound judgement has routines and habits or standard practices.

  -- A leader with sound judgement does not rethink these habits prior to employing them. Rather, the leader simply uses them.

  -- The use of habits frees up the leader's mind to pay attention to other matters which are not governed by habit.

  -- The use of habits frees the mind to attend to things which might be preconscious, things which might need to be elevated to the status of conscious.

- Anticipation of problems, of issues, is an important component of sound judgement. Knowing what is likely to occur, or apt to occur, in a given situation is crucial. Being able to recognize this is such a situation is crucial and is due to tacit knowledge.

  -- Such knowledge only comes through experience and practice (combined with theoretical knowledge).

- Making decisions is <u>not</u> a matter of going down a list of options, or a list of pro's and con's.

  -- Giving adequate weight (value) to the pro's and con's is crucial. Knowing (understanding) the appropriate weight is a matter of tacit knowledge.

  -- Identifying what should, or should not, be on the list of pro's and con's is also crucial. Again such identification is a matter of tacit knowledge.

  -- Being able readily to bring up from memory appropriate candidates for such a list is important.

     -- A computer would go through an entire list and compare each item to selected criteria; the computer may do this very quickly.

     -- But a human being's mind does not work that way; rather the experienced human mind goes rather quickly to the appropriate candidates. This is tacit knowledge at work.

- Before a decision can be made, the need to make a decision has to be recognized; the appropriate question has to arise, to occur to the person.

  -- The act of bringing the appropriate question to the conscious surface is not a conscious act. Rather the arising of the question is accomplished tacitly, pre-consciously.

  -- The appropriate question is far more likely to arise in the person with experience and training. The appropriate question is simply unlikely to occur to the inexperienced beginner.

  -- Deciding to recognize an appropriate question is not a conscious decision; it is the result of tacit knowledge or understanding.

- The human being's brain is constantly filtering out information (perceptual experience) and, concurrently, allowing other information to be admitted.

  -- The experienced person's mind routinely filters out extraneous information, and holds in abeyance, or focuses in on other information perceived preconsciously to be relevant. It simply is humanly impossible to consider consciously all possible information.

  -- Decisions depend on information. But you do not make conscious decisions regarding what information to filter out or let in.

  -- Information is sorted out, organized pre-consciously, before you consciously think about it.

  -- The ability to recognize which information is relevant is a product of tacit knowledge.

- Often, the decision-making process can <u>not</u> be a series of steps.

  -- There simply may not be time.

     -- (A person is pinned in a boat. A person has stopped breathing. A person is developing signs of hypothermia.)

  -- The experienced leader simply "knows" this is a given problematic situation.

     -- (A person is pinned in a boat. The leader does not ask if a problem exists. The leader knows. A beginner might wonder or ask.)

- The experienced leader has developed habits which are appropriate and prevent a problem from occurring. These habits are a result of appropriate decisions (perhaps pre-conscious) made much earlier, forestalling the problem.

  -- The leader is usually making on-going decisions-- constantly evaluating. These are generally not conscious, but rather pre-conscious.

     -- You don't make a decision to evaluate a situation, you simply do so.

     -- The decision to stop and make a conscious, deliberate decision is crucial. But the first decision (to stop and make a conscious, deliberate decision) is not the result of a series of deductive steps.

     -- A person with sound judgement often does not answer the question "does a problem exist?" with a "yes" or a "no." More often the appropriate answer is "maybe" or "there might be in the future and I had better monitor it."

  -- Therefore, unlike the digital computer's use of simplistic either/or two-valued logic, persons with sound judgement function in the realm of "multi-valued" logic.

IN SUM

- Sound judgement relies upon:

  -- tacit knowledge for a pre-conscious selection of appropriate information,
  -- the use of appropriate habits and pre-conscious decisions and judgements,
  -- the use of unarticulated tacit knowledge to make judgements and to provide a basis for conscious decisions.

- Many, perhaps most, "decisions" and judgements are made pre-consciously, because the leader with sound judgement is actively aware and is engaged in ongoing evaluation of people and the changing environment.

  -- This ongoing active awareness and ongoing evaluation is not an ongoing series of decisions, but it is crucial to sound judgement.

- Many, perhaps most, decisions are routine, a matter of habit or standard practice, rather than a result of conscious decision-making.

- Consciously made decisions are not the result of a series of logical steps.

- Rather, conscious decisions are the result of awareness and thought along with sound habits, tacit (practical) knowledge, theoretical knowledge, and appropriately (but tacitly) selected information about the given situation and the environment the leader is in.

- Judgement is not mere opinion, nor is it subjective.

- Matters of judgement can be backed by good, sound reasons, although it may be difficult for the person to articulate those reasons.

  -- Opinions can not be backed by sound reasons.

- Sound judgement requires a background of experience and knowledge. This background gives a basis for the soundness of the reasoning.

  -- Knowledge includes both tacit knowledge (knowledge derived through practice and experience) and theoretical knowledge (knowledge derived though books, classes, and understanding the theory).

How, then, do we describe the leader with "good judgement"? John Miles defined good judgement as "making a decision [with a satisfying outcome] when faced with a potentially hazardous or risky situation" (p. 503).

But actually, within the context of tacit knowledge and habit, the leader with good judgement is better described like this:

> A person who, as a consequence of experience, knowledge, and practice, has developed sound habits leading to proper preparation and prevention of problems, has developed the ability to recognize and forestall potentially dangerous situations, and has acquired the ability to make decisions and react quickly and appropriately enough in situations imposing immediate danger.

However, key elements of good judgement are prevention and preparation. The exercise of good judgement and decision-making starts from the very beginning of the excursion, back at its very inception. The leader who has the experience, knowledge, and ability to forestall a problem before it is a problem ultimately has better judgement than the leader who merely reacts to dangerous situations as they occur.

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FOOTNOTE

[1] Currently, the digital computer does not mimic the human brain. The human brain and the digital computer work in very different ways. Artificial intelligence researchers recognize that computers have very great computational powers, and can do things such as play chess through a very fast working out of possible combinations, but the human brain does not work well in that way.

The human brain uses what is better described as a heuristical approach based on best-case approximations, in which an answers in the logical steps do not have to be clearly "Yes" or "No." The brain uses what is better called a "multi-valued" logic. (For a more complete discussion, see Nadeau, 1991.)

In areas in which possibilities are clearly defined, such as playing chess, computers are very powerful. However, researchers have found that in matters of things such as perception, the computer has much less capability than a human baby. A baby can easily know its mother's face, whereas a digital computer can not recognize that face.

TEACHING TECHNICAL SKILLS THROUGH PLAY

By

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ABSTRACT

The value of light-hearted play in teaching technical recreational sport skills is immense. Children as well as adults can learn more quickly and completely with a games-oriented approach. The instructor or leader must understand how to: select activities that target specific skill development, safely manage the play environment, and direct play to build enjoyable, intensive learning experiences.

A Games Philosophy

Teaching technical skills through play is an exciting, fast-paced experience to which children and adults respond with enthusiasm. Kids stand poised for action - lots of action - and their desires can be met by an instructor tuned into the effectiveness of play in a variety of activities -- crosscountry skiing, canoeing, kayaking, orienteering and more.

Playing games with core physical skills provides an enjoyable way for people to learn basic skills quickly and to combine them efficiently

into athletic movements. Short, light-hearted exercises and activities meet a child's need for action, involvement, speed, challenge and fun.

Games can also benefit adults because the activities encourage participants to loosen up physically and mentally. Adults can channel the intensity they often bring to a workshop into tension-free learning.

Often without realizing the hidden goal of excellent skiing or paddling, participants respond to intriguing tasks in a game, immerse themselves in good practice and expand their means of safely participating in the sport. Ultimately, they become more proficient in the activity.

An emphasis on cooperative play also gives young learners an attractive alternative to I-dare-you follow-the-leader schemes and provides them with new tricks for outdoor entertainment. Kids and adults can both appreciate the element of cooperation that allows them to have low-key fun with other participants.

Safety can be promoted wisely and well by leaders who understand how to encourage good playing. Beneath the laughter and seeming chaos is an organized approach that requires much structure and more work on the leader's part. Establishing a clear organization and ground rules for safe play is a necessity.

Basic Organization

The Objective. Every game has a hidden agenda for the participants, and it is matched to the abilities of individuals in a group. The leaders target a specific skill or move that they wish to

develop and choose an activity that encourages its practice. For instance, tag games on snow promote lots of turning and speed control.

Duration. Avoid running a good game into the ground. Stop it when participants want more! With younger kids, you need lots of short tasks to keep their attention, which means a big bag of tricks.

Intensity. Intense activities may be exhausting or become chaotic, so instructors should be prepared to call time-outs to rest or to reorganize. For instance, slalom courses on flatwater require a series of short sprints between "gates" (bobbers) which can be very fatiguing. Recognize when it's time to take a break or change to a low-intensity task.

Total Participation. Everyone plays, and no one stands on the sidelines. Games that eliminate players often stop the practice of those who need it most. Make sure the last skier or paddler over the line gets to make the next call.

Role of the Leader. The leader should play with the players as much as possible and be careful of being an observer who can subtly affect players' psychological comfort. However, a referee *is* needed in some activities to direct boisterous action.

Pair Teams. Creative ways to choose partnerships or teams eliminates the socially disastrous effects of being the last person chosen. Choose teams by clothing color, birth month, favorite food, favorite animal, type of skis, color of boat....

Cooperation vs. Competition. Activities should emphasize enjoyment through participation rather than keeping score. However, competition against oneself can be valuable, and "personal best" activities encourage a person to improve his or her individual record.

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For instance, establish a two-point course where each skier counts his or her total number of strides between the points. The next time the skier tries to reduce the number of strides with help from the leader: flex the leg more to push off or glide longer on each ski. It's a great way to focus on specific skills.

Terrain. The terrain should work in the participant's favor and help them meet the game's objective. Skiers find wide open spaces better than narrow trails. Flat or gentle terrain is often safer than steep inclines. Paddlers need gentle rapids first.

Collisions. Some activities lead to collisions or pigpiles and should be avoided for safety's sake. Choose games where the participants need open spaces to play well. Skiers should avoid hand tagging where their skis can cross; ask them to throw a hat or mitten to tag another player. Paddlers should lob balls or sponges at other people. "Soft" props that give way upon impact also enhance safety.

Rules. A few simple rules are easiest to remember and observe. Complex activities can get truly confusing. Basis safety rules might be:

- Be able to ski around someone who has fallen.
- Do not intentionally ram another craft.
- Let go of your partner if you are going to fall.
- All action stops until a capsized boat is rescued.

Traffic patterns can establish "rules of the road" with "up" and "down" travel lanes on a hill or in a rapid, passing zones and safe stopping places (not in the middle of trail intersections or in tiny eddies!)

Sample Games

Many great games ideas come from a leader's experience in other leisure programs. The following activities have been adapted from activities used in community recreation programs and ropes course programming. Be creative, adapt childhood games and activities, and keep watching other arenas for interesting ideas.

I watched the University of Massachusetts' women's basketball team lead a community clinic for young girls, and their warm-up movement drills provided me with the inspiration for a new round of ski activities. The muse can strike at any time!

The following examples show how a few simple games can be modified for the ski or water playground:

Snowplow Trains. Flat land, packed snow conditions. One skier is the plow, and another skier is the engine (with or without skis). The engine pushes the plow across the snow. The plow can brake and make the engine work harder. Skiers can have train races or pretend to plow city streets. Great for skiers with limited speed control to learn how to turn without fearing the hill!

Pie Tag (or Pizza Tag). Flat land. Skiers stay within an playing area with boundaries (wearing one or both skis). One skier is "it" and tries to tag other skiers. Skiers are safe if they drop into wedge and call out their favorite pie (or pizza). This activity also encourages quick turning and active skating.

Slowest Snowplow Races. Moderate to steep hills. On "go," each skier uses a wedge to descend the hill as slowly as possible without stopping. The trick is to keep moving. Slowest person wins! The goal is

speed control in a braking wedge. This activity can be adapted to water, where kayakers paddle across flatwater as slowly and *smoothly* as possible by linking perfect strokes.

Crossover Dodgeball. Flat terrain or flatwater. This variation on dodge ball keeps everyone playing the game. The playing field has an imaginary line down the center. Skiers or paddlers divide into two groups and choose a side for their team. They try to hit the opposite team with the ball, and the dodging creates lots of action on the field. People who are hit cross over the line and join the other team. Playing with one ski increases control, and asking paddlers to stay within 20 feet of the line keeps the action contained where the ball can reach them.

Sharks and Minnows. Flat land or flatwater. Establish a rectangular playing field with safety zones at each end. The entire group (of minnows) waits in one end zone and prepares to ski or paddle to the other safety zone. A "shark" waits in the middle and yells "shark attack" to signal that the "minnows" must leave their safety zone. The shark tags as many minnows as possible with each passing, and each minnow becomes a shark as soon as they are tagged. Lots of fast action in this one!

THERAPY IN THE MOUNTAINS

By

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ABSTRACT

This was a slide presentation based on the author's summer internship in therapeutic recreation. The internship was done at a North Carolina wilderness program for youth 8-18 years of age with a diagnosed learning disability and/or Attention Deficit Disorder (ADD/ADHD).

Try to think back to one of your greatest challenges. Perhaps it was a course in college or tackling a difficult ski slope or dealing with some difficult issue at work. Now.... imagine yourself as a 14 year old who has never climbed trying to rappel down a sheer cliff. The belayer is your lifeline and gently but firmly encourages you to begin your descent. It is difficult to let go but finally you do and then you're dangling in empty space. With a great deal of effort, the next thing you know, you've reached your goal - the bottom of the cliff. And then you realize there is no place else to go but back up.

Children with Attention Deficit Disorder (ADD) are "learn by doing", trial and error learners. This characteristic makes them excellent candidates for experiential learning. The risk in this wilderness program is primarily perceived risk. The safety factor is controlled and the child learns to manage risk. An intensive staff training of 2 1/2 weeks includes whitewater rescue techniques and other skills needed to maintain safe risk-oriented activities.

Children with ADD are seekers of stimulation. They are biologically driven to look for the novel and interesting. The greater the perceived risk, the greater the sense of accomplishment.

The participants in this program are 8 - 18 years of age and all have diagnosed learning disabilities and/or ADD. They have often experienced failure in the classroom setting. To provide the students with a positive intervention, this wilderness program features success-oriented, high adventure programs with an emphasis on developing self-confidence, social skills, and problem-solving skills. Many of the students fly in from all

over the country for this unique program nestled deep in the mountains of North Carolina

Treatment plans are completed for each participant identifying areas of potential growth during the 12 day sessions. Each phase - rock climbing, backpacking, and whitewater rafting - are used as interventions. To better understand treatment goals and specific interventions, it is important to understand the characteristics and manifestations of ADD.

It's difficult to place labels on these kids -- their nature is generally caring and sensitive and many end up as caregivers. But they have a neurobiologically based problem for which many need treatment. They've often been battered around in school system and have poor peer relationships. They're the kid that's constantly in trouble. And they've built walls to protect themselves and these walls hold lots of anger and frustration.

Throughout this paper the term ADD is used. But this abbreviation refers to a broad spectrum of diagnoses and problems. In 1980, the diagnosis of Attention Deficit Disorder was formally recognized in the Diagnostic and Statistical Manual, 3rd Edition (DSMIII), the official diagnostic manual of the American Psychiatric Association (APA). This diagnosis of ADD also includes another distinct category of Attention Deficit Hyperactivity Disorder (ADHD).

CHARACTERISTICS OF ADHD:

- Inattentativeness
- Overactivity
- Impulsivity
- Interest quickly lost
- Risk seeking

The difference between ADD and ADHD is that people with ADD have difficulty with attention but not with inhibiting behavior. Instead many of them are withdrawn and are often underdiagnosed because they cause few behavior problems.

On the day of arrival, parents and students are met by a counselor as they drive in. While the student and their gear are taken to the child's cabin, the parents meet with staff for an inbriefing. This inbriefing includes a discussion of the parent's goals for their child and any particular information they want to share with staff. On last day, the parents meet again with staff for debriefing. The student's successes and difficulties are shared, with an emphasis on successes. If

particular strategies are found that work for a particular child, these are shared with the parents.

Somewhere between 80-90% of the students are on some kind of medication. On the first day, medication is collected, with administration instructions given by parents. Because of the toxicity of these medications, they are carried by the counselor at all times. Most of these medications are taken at mealtime to minimize the effect on appetite, since one of the side effects of most of them is depressed appetite. While this is done as unobtrusively as possible, there were some positive benefits for the students to not feel different, and to recognize that many of their peers and some of the staff took the same medications as them. Self-acceptance of taking medication for a chronic problem is often a difficult process.

MEDICAL TREATMENT

*1. Stimulants - ritalin, dexedrine, cylert, adderal
2. Antidepressants - imipramine, desipramine, prozac, trazodone
3. Antihypertensives - clonidine

*Drugs of choice

On a backpacking trip, Jeff* couldn't get enough to eat. He was constantly hungry. This is unusual for kids with ADD because medication tends to decrease appetite. But Jeff was on what is called a drug holiday. During the summer he could choose whether he needed his medication (ritalin) or not. He had not taken any since school had ended.

On the second day of hiking, he was having problems. From the time he got up, he began complaining constantly; on the trail he kept counting how many times he sprained his ankle and was very clumsy. Generally, an easy-going guy, he was clearly not himself. So I sat him down and gave him an orange and a bagel (at which point his eyes lit up) and told him to eat them slowly and drink water with them. After he had done this, we talked about his medication and I shared my observations of his behavior with him. I asked him if he would be willing to take his ritalin on an experimental basis and see if he felt and acted more like himself. He readily agreed and within 15 minutes after taking it, we set off down the trail and he was as content as could be, talking about how beautiful the mountains were and what a great trail we were on.

* Not student's real name

The exact cause of ADD is not known but there is a strong hereditary link. Most children with ADD have at least one parent with ADD. And there is usually a family history of other psychiatric disorders.

STATISTICS ON LD/ADD

- Up to 40% placed in Special Education
- 20-30% have learning disability
- 20-35% will repeat a grade
- 60% delayed fine motor skills
- 30% delayed gross motor skills

MANIFESTATIONS

Low self-esteem
Insensitivity to:
- rewards
- punishment
- other controls on behavior

Can exhibit severe antisocial behavior

RELATED BEHAVIORS

Tap fingers and feet
Fidget
Talk out of turn
Problems moving from unstructured to structured
Trouble following rules
Extreme anger outbursts

The wilderness program is set up to address these behaviors, particularly self-esteem, anger management, attention problems, noncompliance and failure to complete tasks, and motivation.

INTERVENTIONS FOR LOW SELF-ESTEEM

The entire 12-day session addresses issues of self-esteem. The child often needs to be center of attention and will go to great lengths to get it. Negative attention-seeking can be reduced by calling attention to areas of the child's strengths. Provide a safe space for trying new things and where failure can be viewed as a stepping stone. In climbing, falling teaches a person how far they can go and they have plenty of opportunity to try again.

Providing one-to-one interaction makes a child feel special. It is also important to recognize that attraction to novel stimulation can also lead to creativity and should be encouraged in positive ways. What is seen as bossiness should be recognized as leadership potential and each child should be given an opportunity to be a leader for some part of the progras.

ANGER MANAGEMENT

Since these kids have difficulty inhibiting behavior, extreme anger outbursts are common. Yelling only escalates child's anger. It is important to talk to them in a calm voice. If possible, talk to them immediately. If not a short time out is often needed. They can go from ballistic one minute to happy go lucky the next. After they have had a chance to "chill out", talk to them about their anger and different ways that they could have responded.

These children often hit each other when angry. With one child, I asked his what happens when he hits someone and he responded that "they hit back". When I asked "then what do you do?", he said "hit them". "Then what?" This continued until I asked "what happens when adults do this?". And he said "they might end up in jail". When I asked him if he could think of other things he could do besides hit them, he responded "tell an adult - or just walk away". So, through a problem-solving process, he was able to come up with some alternative ways of dealing with his anger rather than hitting someone.

ATTENTION PROBLEMS

Since most of the students had attention problems, they needed novel and stimulating environments on a continual basis. Most of the programming took place outside of base camp. They learned to take turns "riding shotgun" and picking music to play in the vans. Music was extremely important when we were traveling as it tended to give them a focus and fewer behavior problems occurred.

Local areas of interest included Western Carolina University, where one of the interns played football and made

arrangements for them to play on the football field and take a tour of the fieldhouse. Another big hit was the remains of the train and bus wrecked during the filming of the movie "The Fugitive". The biggest attraction at an old historic home we took them to were hundreds of bats up in the crevices which they were able to shine their flashlights on. During these trips, clear rules and structure were needed with lots of rewards for good behavior.

The inability to focus and being easily distracted which are characteristics of ADD can result in students missing directions. In some instances, this can be a safety issue. Rock climbing was one of the first things we did. It provided structured risk activity and helped to improve the ability to focus on instruction. Fear is a great motivator and helped the attention factor. It is important to break tasks into smaller ones. Rappeling and knot clinics were held at base camp. Then at the climbing site, we used as few words as possible to explain tasks and then they were asked to repeat the instructions. They were involved in the actual activity as soon as possible.

NONCOMPLIANCE AND FAILURE TO COMPLETE TASK

Children with ADD often have problems moving from UNSTRUCTURED TO STRUCTURED experiences. Planning is difficult and they often need this done for them. It is essential that disorganization is not reason for failure to complete task Each cabin had a picture of backpack with the items needed written on it. Those with ADD are visual learners. When packing for a trip, staff talked through each item and before moving on to the next, checked on each child to make sure the item actually got in their pack.

The students were involved in various aspects of planning process of backpacking phase. Since one goal was to increase independence, they did their own laundry twice during the 12 day session, went on "food buys" for the backpacking trip, packed food prior to the trip, and were involved in choosing where they would be going from several options.

Problem solving skills for youth with ADD can often be described as READY -- FIRE --- OOPS --- AIM. Allowing for natural consequences is an important part of learning better problem solving skills.

MOTIVATION

The final phase, whitewater, included stream exploration which they loved. If these students find something they enjoy, they usually have no problem persisting in the tasks. They are often fascinated with nature, especially anything that moved. I took one young man who was too small to whitewater raft,

according the standards set by the rafting outfitters, fishing for an afternoon. Anticipating a short attention span, I filled my pack with all kinds of activities. To my amazement he fished and played in the water all afternoon, needing my help only to change tackle.

I took an older group of boys to Shining Rock Wilderness Area where we climbed all over a huge quartz rock and then settled down for some creative writing and drawing. All of them participated, pretty amazing when one remembers that these are "tough guys", some who have had problems with the law. Providing lots of encouragement, motivation, and incentive can result in very positive results. One of these students, a young man whose academic record was very poor until his parents found a private school which focuses on kids with learning disabilities and attention problems, was fascinated with this area. I had trouble convincing him it was time to leave. He was asked to return the next session in a leadership role.

After the first session of this program, a letter was received from a parent. Excerpts from this letter include, "I would never have believed it if someone said 12 days would have such a positive impact on my son's (and our) life. _____ came home with a positive attitude, follows directions somewhat better, and shows improved interaction and verbal skills. He is attending a day camp where the counselors related that instead of _____ slugging or yelling at another child who was verbally abusing him -- he actually walked away and told a counselor. This is a major step forward for a child who believes "Do unto others....." We look forward to the July session. _____ will definitely participate in future programs and we will recommend you to the numerous folks who have ADD or ADHD special kids on their hands, and in their tree, and doing handstands on their couches....My husband and I have decided to adopt all of you!"

UIAGM ROPEHANDLING TECHNIQUES

BY
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ABSTRACT
The Union Internationale des Associations des Guides de Montagne's (UIAGM) standard ropehandling techniques are intended to form the standard for guiding ropework worldwide, and in UIAGM member countries, has become the legal standard for instructional institutions and commercial guiding organizations. This session is intended to discuss and demonstrate selected UIAGM ropehandling techniques as applies to these organizations.

THE UIAGM
The Union Internationale des Associations des Guides de Montagne (UIAGM)is an international body that sets the standards for professional mountain guides worldwide.The following countries are members of the UIAGM: Austria, Canada, France, Germany, Great Britain, Japan, Italy, New Zealand, Norway, Peru, Switzerland. The American Mountain Guides Association has made application to the UIAGM for the United States to become a member country and this application is in the process of development.

As the legal body for qualifying guides within its member countries, non UIAGM guides are restricted access to many activities within these countries. As the worldwide standard setting body, UIAGM ropehandling techniques are important guidelines for instructional institutions and guiding organizations to consider - as they are the overriding legal norms in member countries.

ANCHORS
Anchors create a protection arrangement intended to hold any load that could potentially be created in a given situation. Essentially if all else goes wrong and everything in the protection scheme fails, the anchor is there to prevent the guide and client from falling off the route.

Categories: Anchors can be categorized into two classes. Simple anchors are those that are intended to hold loads in one direction. Only unidirectional anchors are needed to build simple anchors. Complex anchors are those intended to hold loads in more than one direction. At least one of the pieces of protection used to create a complex anchor must be multidirectional.

Construction and Arrangement: The placements used in multi point anchors can be oriented horizontally to one another or vertically. Vertical orientations more effectively distribute loads as the angle of the connecting slings is less. All sling angles within an anchor system should be less than 120 degrees and ideally less than 90 degrees.

Connecting the individual pieces of protection together into an anchor is generally done with slings rather than the rope when guiding. This allows the guide to easily adjust from belaying the client to leading without any changes to the configuration of the anchor. Guides carry two - five meter long 7mm slings for connecting anchor protection pieces together.

By using individual slings or by tying a single long sling together at a main point, pieces are joined independently. This is the preferred method of building an anchor. Independent connection is an advantage when one placement in the anchor is distinctly inferior to the other(s). With this method of connection the failure of one piece affects the others as little as possible. The disadvantage of independently connected placements is that load distribution is easily compromised if the direction from which force is applied shifts.

Using a single long sling, a load distributing connection can be made. This connection will distribute loads to the placements through a range of motion and thus maintains distribution if the forces shift. However if one piece fails, the belay will be dropped as the sling extends.

Master Point of Attachment: In guiding, anchors are most effective when arranged in such a way that all placements connect to one common "master" point. A common point reduces confusion and binding and provides an attachment point for rescue systems should they be required. Normally, all belays or tie ins are secured to the master point.

GUIDING TECHNIQUES

The methods used by guides are related to those of climbers, skiers and mountaineers in regular climbing. However, modifications to technique and application often varies from non-guided climbing.

Shortroping: In guiding, the option of moving unroped seldom exists. The guide must be on the rope with the client(s) to secure them in case of a slip or fall even when moving together. The use of the rope to move together under such circumstances is called "shortroping." Shortroping is as much a way to control the client as it is a technical skill.

Endroping: When it is no longer safe to move together or climb short difficulties by shortroping, the guide uses techniques that more resemble those used by climbers on technical ground. One or two clients are tied to the end of the rope - or on two ropes if using double or twin ropes - and the clients are belayed using anchors and belay techniques appropriate to the situation. Endroping is a much simpler procedure than shortroping.

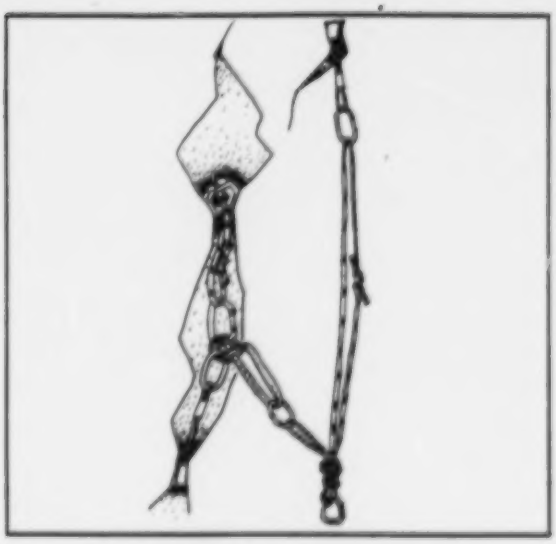
Top Roping: Top roping techniques are used primarily when instructing. By setting a top rope, the guide is able to instruct and coach more efficiently on shorter routes with better proximity to the client. It is also possible for the guide to supervise more than one top rope at a time if ropes are set up relatively close together. Top ropes can be set up in two configurations, top belayed and bottom belayed (slingshot).

Rappelling: Generally, it is preferable for clients to be lowered by the guide, although in some situations, it is appropriate for the client to rappel. All clients should be belayed when rappelling. This can be with a separate rope, one end of a doubled rope, or if the guide rappels first through a bottom belay. Rappels normally occur in three formats: the client rappels first, the guide rappels first, or pair rappels (where guide and client rappel simultaneously).

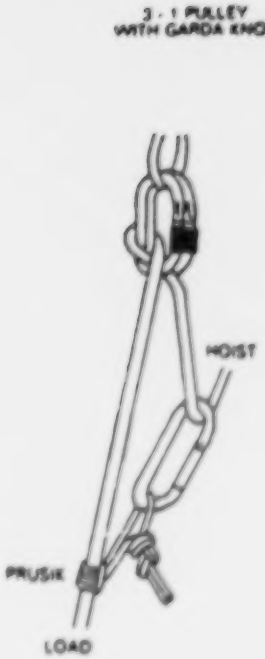
RESCUE SYSTEMS

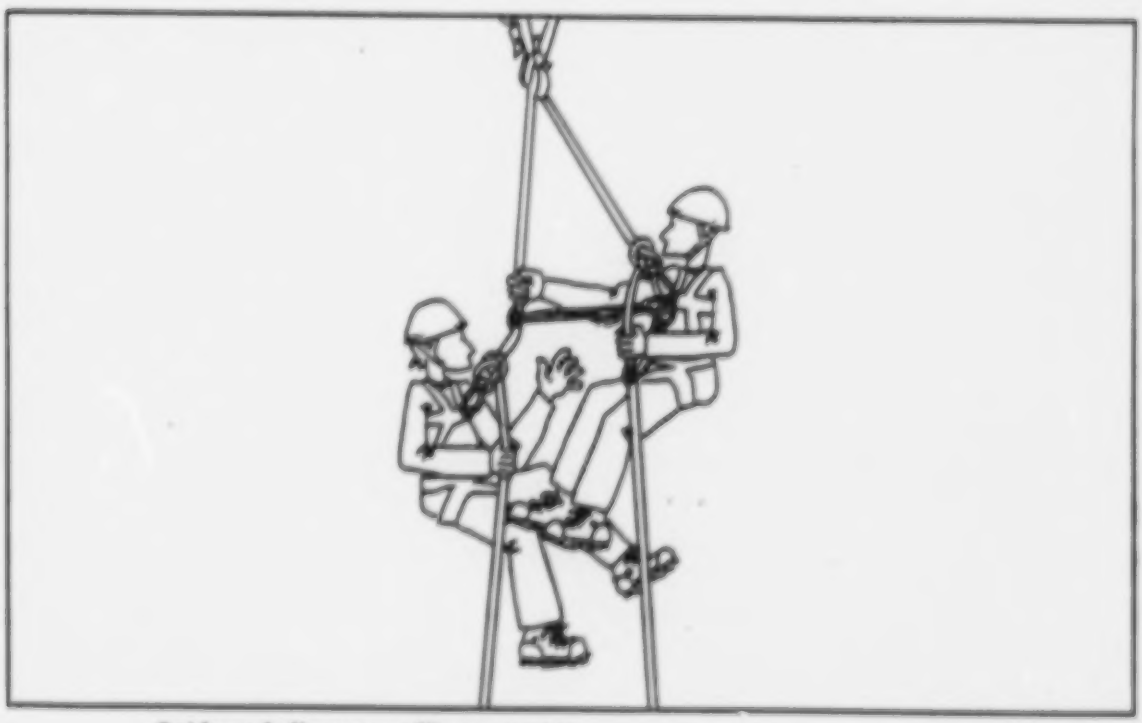
Emergency response and rescue situations require quick, innovative, flexible thinking and a clearheaded, calm approach to potentially complex problems. If working alone, the guide must be prepared to create a solution entirely without help. Guides seldom use emergency and rescue techniques, but when they are needed the response must be fast and efficient to prevent an accident from escalating.

A simple way to look at rescue in the vertical environment is as a series of load transfers. These load transfers shift the weight off the belay system to the anchor, then to friction systems for lowering or pulley systems for raising. If problems develop, the load is transferred back to the anchor so the problem can be rectified or the system modified. It is necessary to anticipate potential problems and have a system flexible enough that it is possible to reverse the load transfer process. There are five primary steps in any improvised rescue scenario: arrest the fall, block the belay to free the hands, transfer the load from the belay to the anchor, create a lowering or raising system, and transfer the load to the lowering/raising system.



Independent connection of complex anchor. Oppositioned pieces of protection used for multidirectional component.

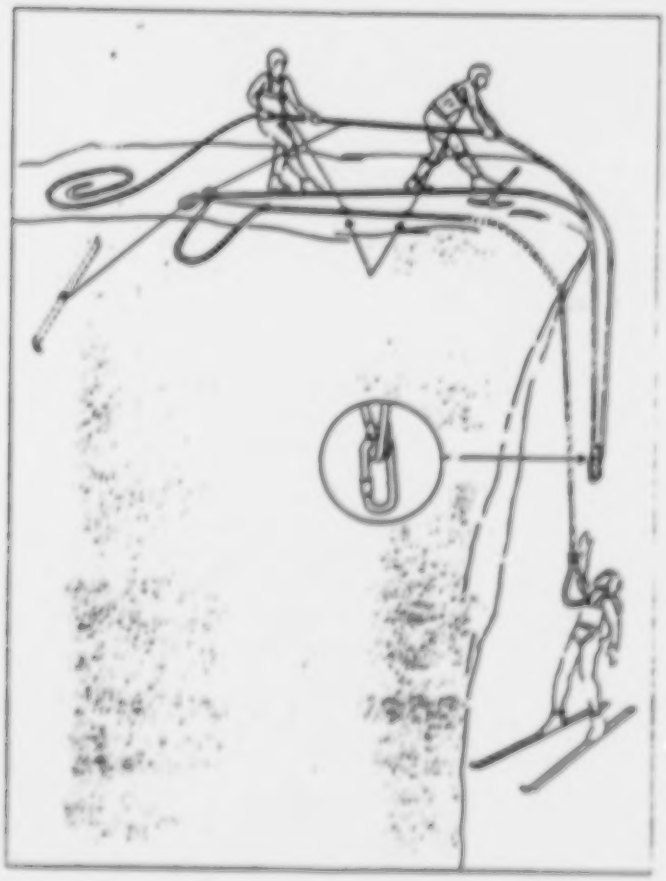


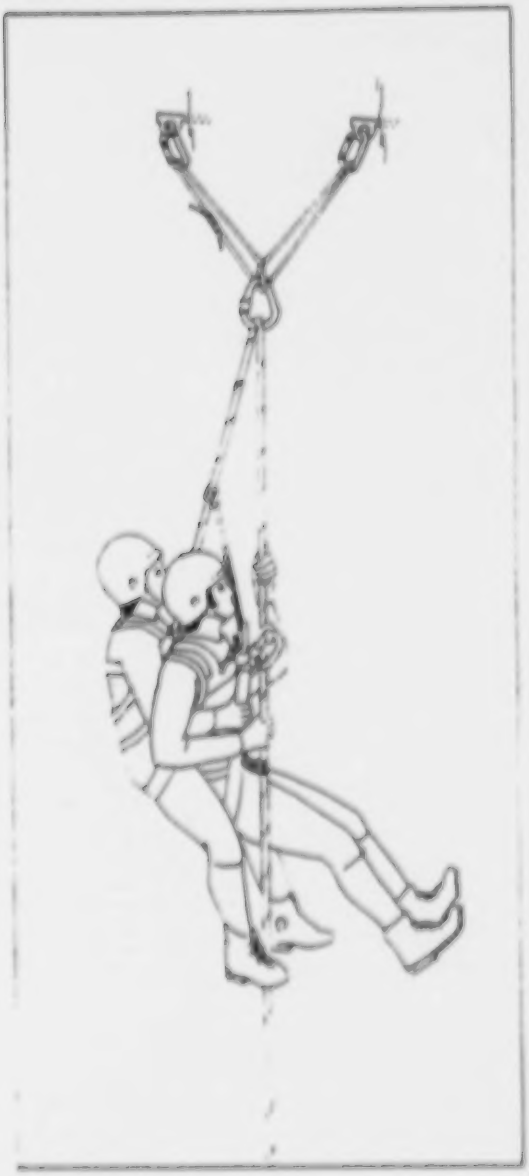


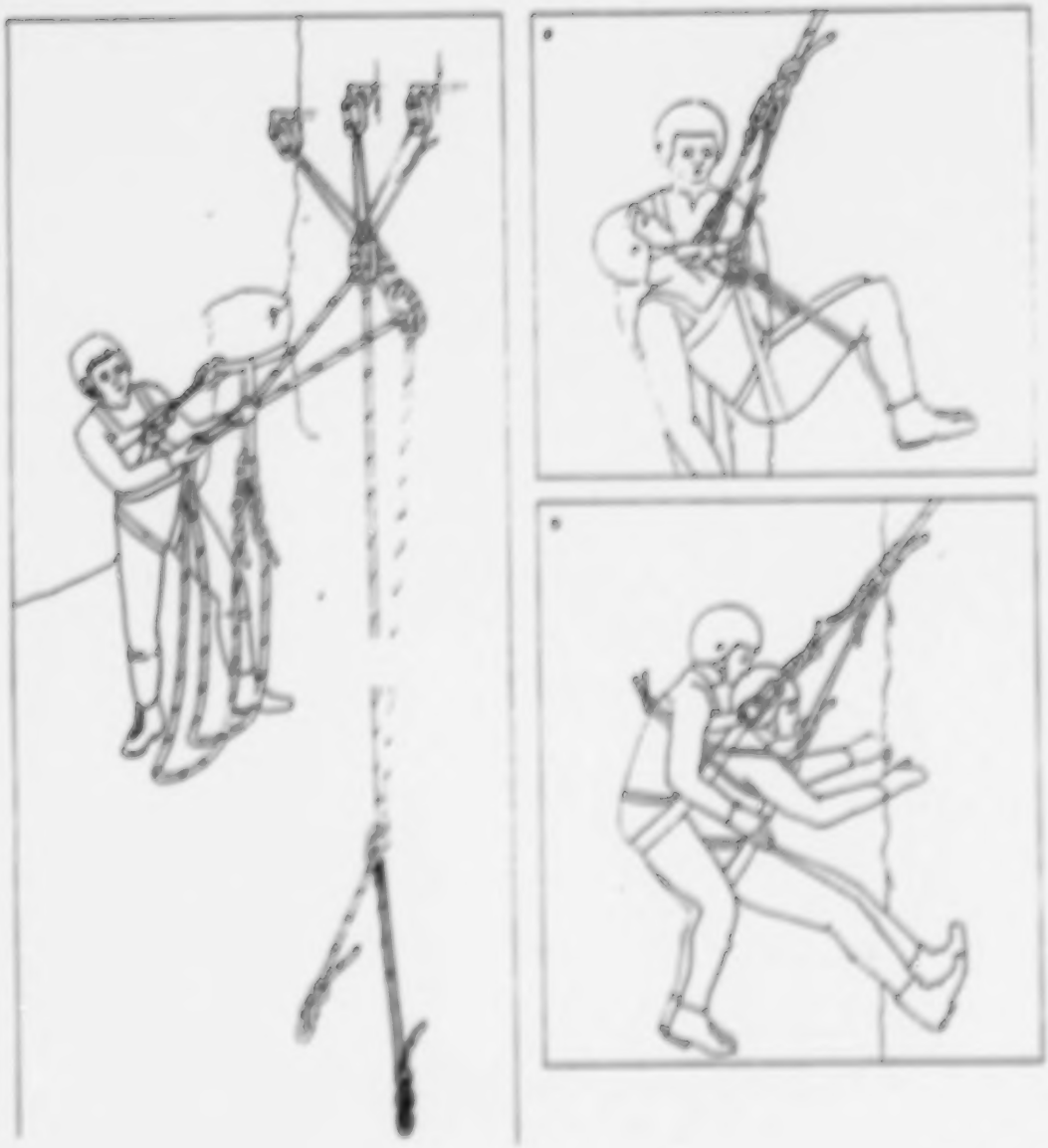
Guide and client rappelling as a pair

Simple horizontal anchor.
Independently connected with 2 slings.

Simple vertical anchor.
Independently connected with 1 sling.







Credits: All text and drawings are from the Canadian, French and German UIAGM Guide's Manuals.

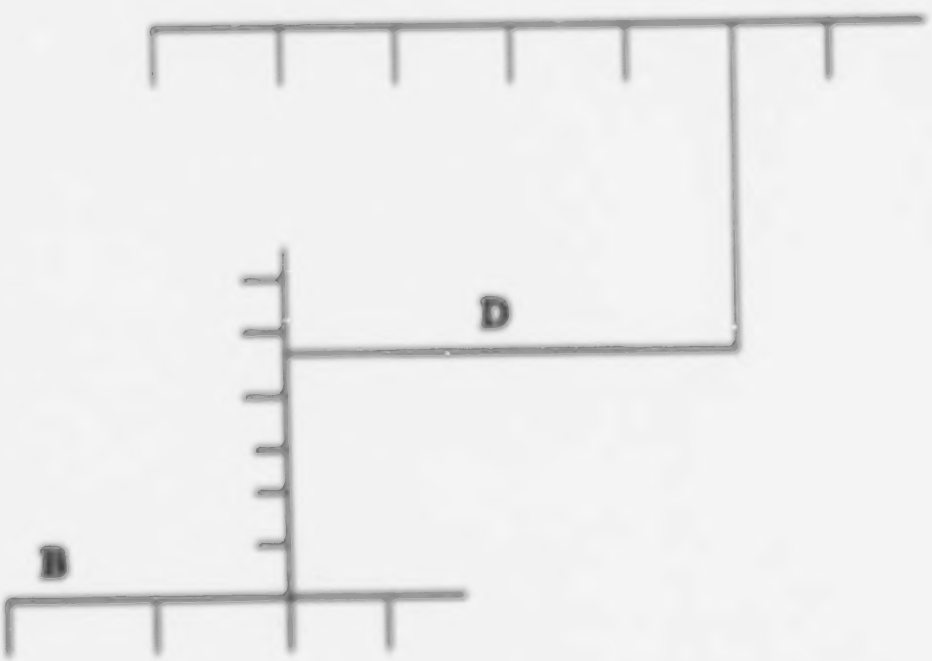
ACMG ROPEHANDLING PROBLEMS

For each of the following problems, place protection, anchors and belays that are best for the client. Sketch and/or discuss the best solution(s) to the problems with reference to:

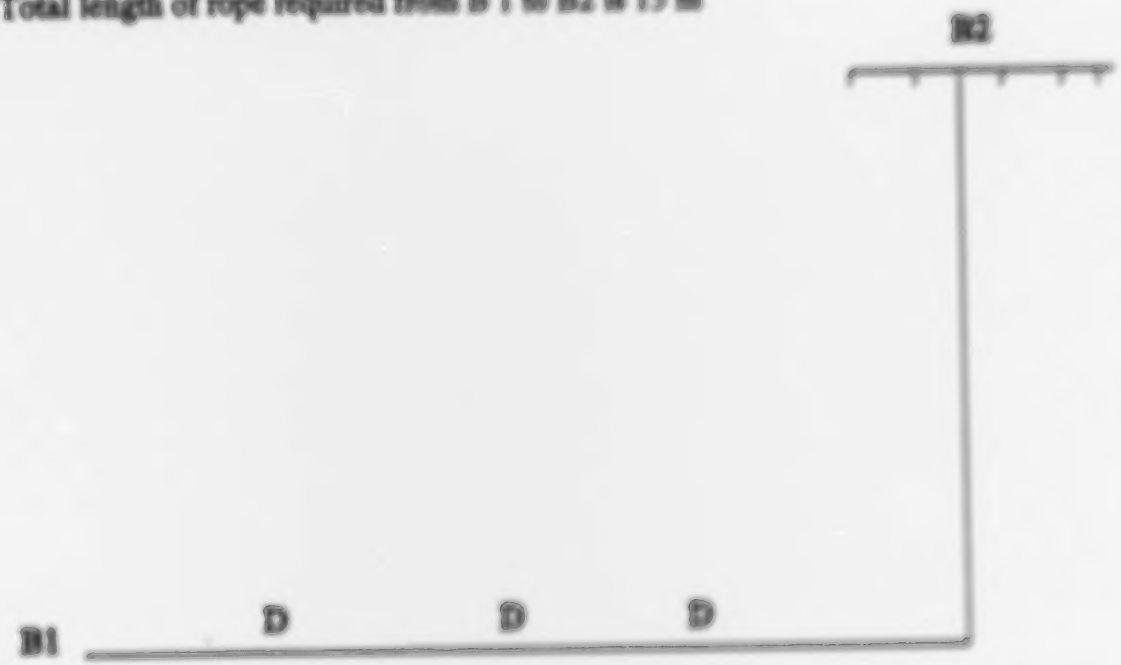
- Rope management
- Line of travel for guide and client
- Client care, management and safety

x = fixed piece of protection
D = difficult move
B1 = starting point (belay)
B2 = ending point (belay)

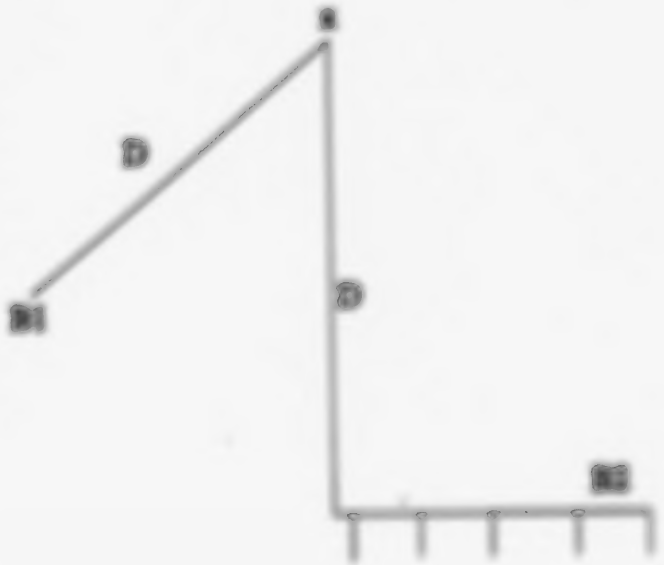
Problem #1
You have 1 rope.
GE to get from B1 to the upper ledge will take 40 m of rope.
Place the next belay on the upper ledge.



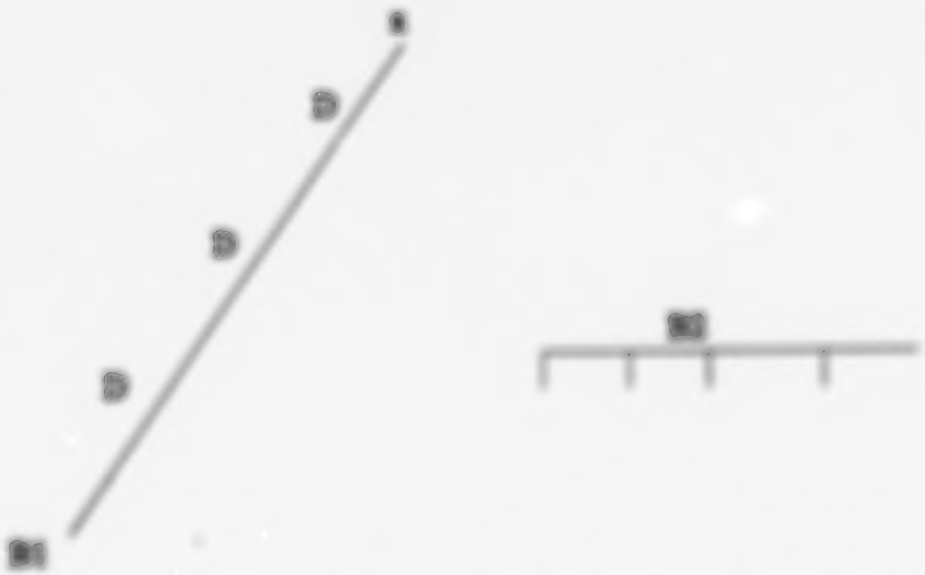
Problem #2
You have 1 rope
Total length of rope required from B 1 to B2 is 15 m



Problem #3
You have 1 rope
It will take 20 m of rope to get from B1 to B2
There are at least 2 good solutions



Problem #4
You have 1 rope
It will take 35 m of rope to get from B1 to B2
The area below and to the right of the fixed pin is not climbable



Problem #5

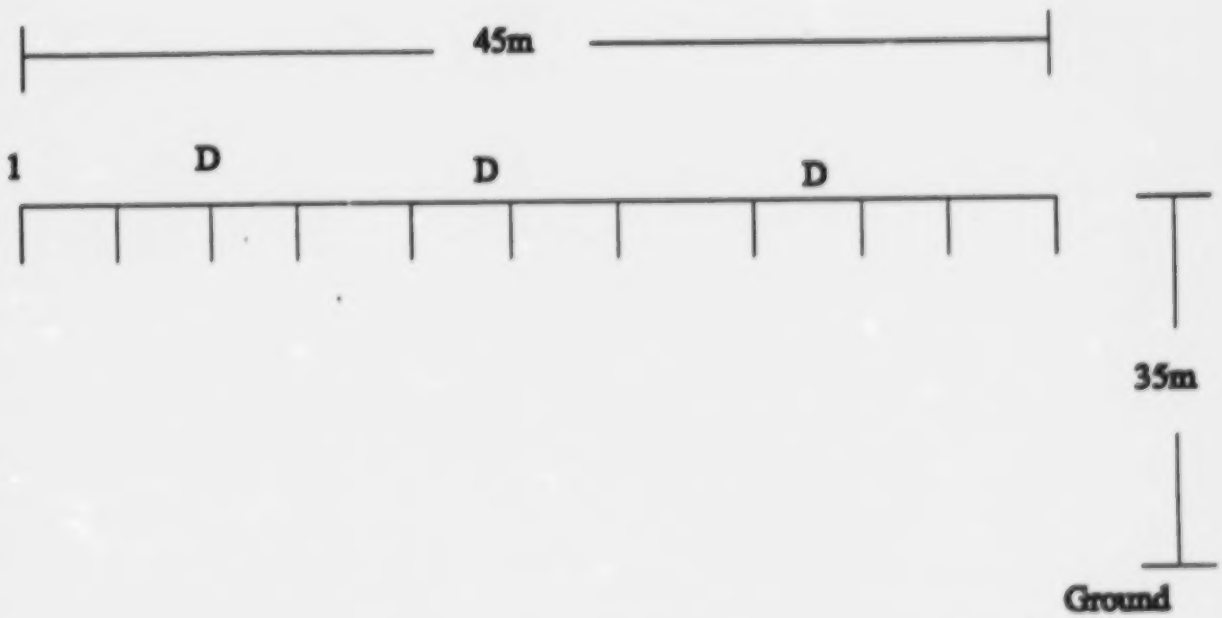
You have 1 rope

It takes 20 m of rope to get from B 1 to B2

The client is not able to climb beyond the first fixed pre

The area below and to the right of the fixed pre is not climbable.

Problem #6
You have 2 ropes, 2 guides and 6 clients
You can get pro wherever you want
The ledge is easy but downsloping, wet and slippery
No anchors or belays are required for the clients once they are on the ground.
Speed is important but not overruled by safety
The area below the ledge is unclimbable
From the right end of the ledge to the ground is climbable by the guides but not by the clients.



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Using Importance - Performance Analysis To Evaluate Teaching Effectiveness

By

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Abstract

This paper introduces the use of Importance-Performance Analysis as a method to evaluate teaching effectiveness in a university outdoor activity program. An important feature of this approach is that it examines both the importance and performance of selected attributes and presents them in an easy to interpret format.

Introduction

Evaluation is an important part of any program or service. It can be used to assess program goals and objectives, quality and improvement, gain support and credibility for programs and assist in the marketing of a program or product (Flor, 1995; Ford & Blanchard, 1993). To be effective, evaluation should include input from three sources: from professionals within the organization (management, staff), from professionals outside the organization (consultants and peers), and from those participating in a service or program provided by the organization (Mengak, Dottavio, & O'Leary,1986).

Importance-Performance (IP) is an evaluation technique originally developed for use in the field of marketing. It is based on the premise that evaluation or feedback be obtained from the consumer (or in this case, students or program participants) (Martilla & James, 1977). IP is simple and easy to administer, provides the instructor with a visual representation of *what* attributes are important, *how* important each attribute is, and *how well* the instructor performed on each of the attributes (Guadagnolo, 1985).

Importance-Performance Analysis

Implementing the IP analysis requires four steps. In the initial stage a set of attributes are developed to accurately describe and reflect the topic of the study. Following the identification of attributes, a questionnaire is developed and a survey conducted. The questionnaire requires that respondents be asked to rate the importance of a particular attribute and rate the performance of the instructor on the same attribute. A five-point Likert-type scale is used (1=low, 5=high) for both importance and performance (Mengak, et al., 1985). This step is followed by analyzing data for the importance and performance values for each attribute. In the final step, data are presented by plotting each attribute on an action grid according to its perceived importance and performance (Figure 1).

Methods

Generating a list of attributes is an important part of the IP procedure. For the purpose of this paper, a list of attributes for providing

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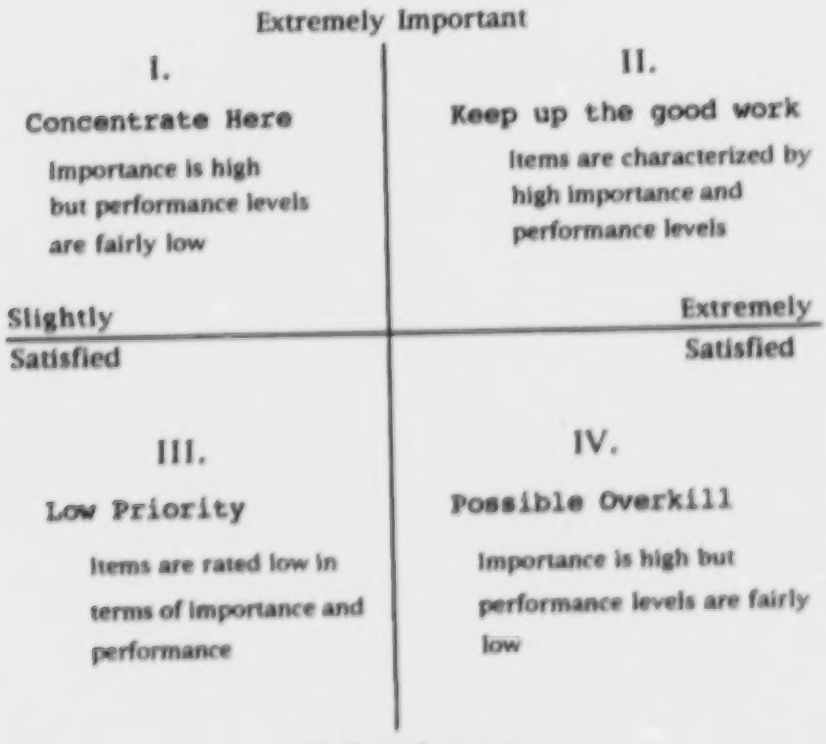
feedback on an instructor's teaching effectiveness were developed by reviewing course and instructor evaluation forms used by a variety of academic departments at North Carolina State University. Teacher evaluation materials from other instutions were also reviewed for possible attributes.

This procedure generated a list of 35 attributes that focused on instructor's teaching effectiveness. This list was reviewed by a group of faculty members in the Department of Physical Education at North Carolina State University. Faculty members were instructed to review the original list of attributes and encouraged to add or delete any attributes they felt were missing or irrelevant. Feedback from this group resulted in a final list of 23 attributes (Table 1).

Figure 1. Action Grid
(Martilla & James, 1977)



Subjects

A convenience sample of students enrolled in the researcher's basic rock climbing and intermediate rock climbing courses during the spring semester 1995 were asked to volunteer as subjects (N = 72) in this study. Those students who volunteered to participate in the study were given a questionnaire to complete during the final class meeting.

Table 1. Instructor's Teaching Attributes
(N = 72)

Code*	Teaching Attributes	Importance Mean	Performance Mean
A	Demonstrates knowledge of the subject	5.0	4.9
B	Use examples to facilitate learning	5.0	4.4
C	Is highly skilled	4.8	4.7
D	Is able to demonstrate skills	5.0	4.6
E	Appropriate material for student's skill level	4.9	4.4
F	Ensures safety of all students	5.0	4.4
G	Uses a variety of teaching techniques	4.3	3.8
H	Reviews previous class material	4.8	4.3
I	Is accessible to students	4.6	4.2
J	Starts and ends class on time	4.6	4.0
K	Enthusiasm for the material being taught	4.4	4.2
L	Uses fair evaluation methods	5.0	4.7
M	Knows students by name	4.8	4.6
N	Provides opportunities to practice skills	5.0	4.5
O	Provides a challenging course	4.8	4.3
P	Presents material in a logical manner	4.8	4.2
Q	Pace of instruction is adequate	4.7	4.3
R	Summarizes material when appropriate	4.5	4.4
S	Stimulates my interest in the subject matter	5.0	4.5
T	Gives feedback to improve skills	5.0	4.3
U	Has a good rapport with students	5.0	4.7
V	Communicates subject material effectively	5.0	4.5
W	Recognizes good student performance	4.8	4.4

*Codes correspond to points plotted on Figure 2.

Analysis of Data

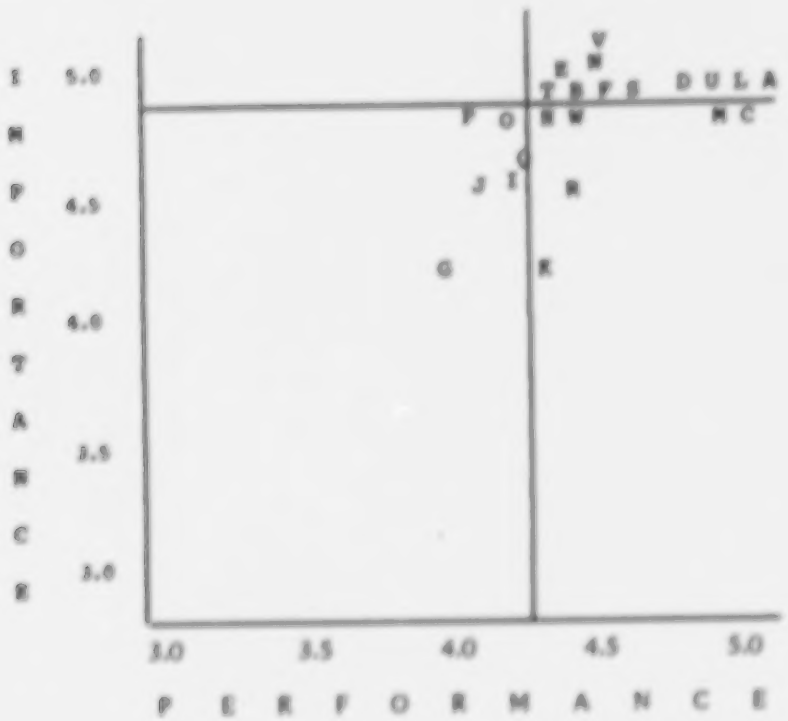
Analysis of data involved calculating the means of the perceived importance and performance attributes. Means were then matched and plotted on an action grid (Figure 2). The x and y axis were positioned on the action grid at the overall mean for each attribute (4.8 for Importance, 4.3 for Performance) This method was adapted from research conducted by Hollenhorst, Olsen, and Fortney (1992) who noted that most attributes tend to be rated high by respondents and therefore very little information is provided relative to problem areas or areas requiring attention. By incorporating the IP analysis, the instructor was able to view the importance and performance of a given attribute and its relationship to all others.

Results

The results of this study suggested that students were generally satisfied with the teaching effectiveness of the instructor. This finding is supported by the high importance and performance ratings noted in the quadrant "keep up the good work" (Figure 2). Students were particularly satisfied with the instructor's knowledge of the subject matter, ability to demonstrate the skills associated with the activity, rapport with students, use of fair evaluation methods, opportunity to practice skills, stimulating interest in the activity being taught, communicating subject matter, ensuring safety, providing feedback to improve skills, and the material being taught is

appropriate for the student's skill level. In addition, the importance scores of six attributes fell on the overall importance mean (4.8). This finding suggests that the instructor is doing well in these areas and should continue.

Figure 2. Action Grid for Teaching Attributes



Four of the attributes; is highly skilled, reviews class material, knows students by name, and recognizes good student performance were identified as high in performance, suggesting that students were satisfied with the instructor's performance and that the instructor continue to stay focused on these attributes. Two attributes, pace of instruction is adequate and material presented in a logical, orderly sequence were scored low on performance. In this situation the instructor may consider channeling more attention into the planning and delivery of course material.

Respondents also identified five items that were low on both importance and performance, thus indicating these attributes as low priority. These attributes included: access to students, beginning and ending class on time, enthusiasm, and using a variety of teaching techniques. One item, summarizing class material was noted by respondents as performing well but not being that important, suggesting that less attention be focused in this area.

Discussion

I-P analysis is an adaptable and easily interpreted technique that is easy to administer, score, and evaluate. Importance-Performance analysis may be a valuable tool in assessing the teaching effectiveness of instructors in university sponsored outdoor activity classes. Through this process, both instructional strengths and weaknesses can be identified. In this study, the instructor's strengths centered primarily around technical, safety and teaching skills, and the instructor's organizational and communication skills. Weaknesses might be in the actual delivery of the activity (challenging course, presentation of material).

Other uses of I-P analysis may include developing a set of attributes to assist program managers and field staff identify strengths and weaknesses of specific outdoor programs or program components, evaluating student's or staff in leadership roles, or including IP as one part of a more comprehensive evaluation process. When used as a repeated measure, I-P analysis may help detect changes in one's teaching effectiveness, program delivery, or other pre-determined factors. In conclusion, Importance-Performance analysis can provide a useful and adaptable alternative to traditional evaluation procedures.

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WHEN BAMBI MEETS GODZILLA:
Bringing Environmental Education and Outdoor Recreation Together

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Abstract

Can (and should) outdoor recreation serve as a vehicle for environmental education? Can (and should) environmental programs also teach recreational skills? The relationship between outdoor recreation and environmental education is examined. Suggestions for incorporating environmental education into outdoor and adventure programs, and suggestions for incorporating recreational activities into environmental education programs are offered.

Background & Introduction

In 1988, two different things sparked my interest in the interconnections between outdoor recreation and outdoor education -- or, more specifically, between outdoor recreation and environmental education.

First, I was involved in setting up a study, for the Minnesota Department of Education, intended to examine the role of resident education centers in meeting Minnesota's curriculum guidelines on environmental education (Farber & Hibbey, 1988). This study made an effort to look at some of the "basics" in environmental education programming, and its findings made me look at the benefits of outdoor programs in general. In looking at educational programming at residential environmental education centers in Minnesota, I realized that while environmental education is focused on educational outcomes, it often results in recreational outcomes as well (see Schatz & Farber, 1990, Schatz, Hibbey & Farber, 1993).

Later in the year, I met with the US Forest Service to discuss the development of visitor education materials for the Boundary Waters Canoe Area Wilderness. In looking at the educational needs of the US Forest Service in the BWCA, I realized that outdoor living skills are not the only appropriate focus of outdoor recreation, because skills can not exist outside the context of their application. It is impossible, I think, to teach minimum impact camping without some reference to the processes of environmental degradation the techniques are intended to minimize. While outdoor recreation is focused on recreational outcomes, it usually results in some education, too.

To the extent that planned and unplanned outcomes can be equated, the two types of programs seem to produce the same results. There is really nothing new in this understanding. Education and recreation, after all, share the same linguistic and conceptual roots; and the idea that education and recreation share common ground is also well supported in our professional literature (Atkinson, 1990; Ewert, 1989; Ford, 1981). Education and recreation do seem to fit together in outdoor programs -- especially in programs emphasizing environmental awareness and environmental ethics -- and what I have found in the literature seems to support my conclusions concerning the basic relationship between recreation and education. I should be satisfied, but every time I pick up this material I realize I'm not. I still haven't been able to fully answer what seem to be two

very basic questions: (1) How close is the relationship between outdoor recreation and environmental education? and (2) How can the two best be integrated?

Including Environmental Education in Outdoor Recreation Programs...

In a rather simplistic view, "environmental education" refers to programs or processes where we are trying to help participants develop: (1) improved knowledge about the "natural" environment; and (2) an understanding of how human and non-human elements of that world are interrelated.

Outdoor adventure programs -- the outdoor recreation addressed here -- included experiences or activities where people are lead through a series of tasks with the aim of creating personal growth and group development, or of teaching outdoor living skills (Ashton, Mahony & Parker, 1992). To the extent that they are focused on relationships at all, these programs are focused on human-human interactions (helping participants to develop a better understanding of how they relate to themselves or to other people) rather than on the relationships between humans and the non-human environment.

Given these different emphases: Can, or should, those of us involved in outdoor adventure programs -- like ropes courses, canoe trips, and outward bound programs -- incorporate environmental education into the experiences we provide?

Rationale

As teachers in the outdoors, or as recreators teaching people to enjoy the outdoors, we have an interest in helping our participants better understand the environment -- if only to protect the resources on which we rely. We should, therefore, be very interested in environmental literacy, and we have a sound justification for including environmental education in our outdoor programs. Doing so can help to create a more environmentally literate society. This is especially appropriate, because it is impossible for participants to use the skills we provide them without some contact with the outdoors -- skills do not get applied in a vacuum.

Another important consideration, I think, is that during outdoor recreation activities, we have our participants attention. In educational programs, it is often difficult to command enough attention to facilitate learning, but, it is very difficult to be vague when you're stepping onto a ropes course or into a kayak for the first time. This gives those of us involved in outdoor recreation pursuits an ideal opportunity to teach. One of the major rationales for including environmental education in our recreation programs is, then, "because we can."

In addition, adventure recreation presents effective learning opportunities. Field trips -- time spent in the "natural" world -- offer potential for very rich laboratory experiences. We know from research and personal experience that our programs can have a major personal impact, so why not take advantage of the opportunity and include an environmental context or laboratory experience in the rich and rewarding personal recreative experiences we help to provide?

Steps for Action

Dr. Len Mahony, at the University of Minnesota, has identified nine steps we can take toward incorporating environmental education into our outdoor recreation programs (Ashton, Mahony & Parker, 1991, 1992).

1) Plan for environmental education, don't relegate it to the role of an "incidental outcome."

If we want to ensure that education occurs, we need to treat it as an important consideration in all planning decisions. If we include it in our mission statements, and make it a planned objective of our programs, we can justify the staff, time, and effort required to make education happen.

5) Create a philosophy of environmental harmony in programs and operations.

Our whole program should be operated in a way that fits with its environment and its environmental principles. Ask questions like, "Does our septic system drain into a lake?" "Do we actively practice the three R's?" and, "Did we create an environmental disaster by clear cutting 50 trees to put up a ropes course?" If we don't practice what we are trying to teach, if we fail to convey a consistent message, we are not laying the ground for successful learning.

5) Encourage a sense of awe and respect for natural environments.

Outdoor environments are unique and special places -- like the Louvre, the White House, and Wrigley Field. If we were to take a group to these places, they would not likely consider going to the bathroom on the lawn, throwing trash on the ground, or singing loudly in the hallways because they like the echo. In a wilderness setting or on urban one, the elements that comprise the environment are essential to the life that surrounds us, and that life is deserving of respect.

6) Promote a level of comfort with the environment.

Many of our participants live in urban environments and see the outdoors as a "different place." They wonder about it, have concerns about it, have fears about it, and feel uncomfortable there. If our participants feel uncomfortable in the outdoors, they will have a very hard time focusing on anything other than their own discomfort, and stand little chance of ever learning to enjoy or appreciate the natural environment as a thing of beauty.

If our programs are poorly planned (or poorly executed), or if our participants don't eat well or dress appropriately, environmentally friendly behavior is often relegated to a position of secondary importance. Participants in a camping program, for example, will not appreciate the need to practice minimum impact techniques if they are cold, wet, and hungry. They'll want a big fire -- perhaps need one -- regardless of the impact on the environment. Physically comfortable participants, in contrast, may be more willing to participate in a discussion of the impact of fires -- even small ones -- on the camping environment, and may be content to sit around a candle lantern in the evening.

Emotional comfort is also an important consideration. Giving program participants an opportunity to acclimatize, to get used to the outdoor environment, is an essential first step towards developing a sense of emotional comfort. We should offer them an opportunity to explore the environment, to listen to the birds, to look at the scenery, to slow down, and to appreciate the things they see.

Developing our participants' awareness of the elements in the environment should also include some early instruction to help them deal with fears before they become a problem. Participants might or might not ask things like, "Are there poisonous snakes in the water? Are there dangerous bears? What do we need to do to avoid poison ivy? "Asked or not, answering questions like these, teaching about what is and is not dangerous in the environment early in a program can help improve participants' levels of comfort, and give them an opportunity to become concerned about the environment rather than their own safety.

Teaching basic skills early relates to this same concern. Participants in a canoeing program who are afraid they will drown will have very little time to devote to environmental considerations. Basic instruction, in this case in canoeing skills and proper use of a PFD, can help allay such fears, can increase comfort levels, and offer at least an opportunity to appreciate the environment in which the activity is taking place.

6) Teach and live environment friendly and techniques.

By personify modeling friendly behaviors, and by explaining the reasons and techniques of behaviors are more friendly than others, we can help our participants practice environment conscious. Discuss impact techniques are related to specific environments, so it is important to explain to participants how specific behaviors impact on specific environments or elements of the environment.

6) Emphasize interrelationships.

Our behavior does have unexpected outcomes. In order to teach environmentally friendly behavior, it is important for us to think about what some of these outcomes might be.

Leaving food waste is an area convenient to teach. For example, once students learn and realize that the site is a good place to get food, once a bear has learned this lesson, it has a tendency to stay near the site looking for food. It may eventually become enough of a nuisance that it must be trapped and relocated or, in a few documented extreme, killed to reduce the likelihood that it will destroy property or injure someone. This is one negative impact (at least from the bear's perspective) that is relatively easy to avoid by not leaving food out for the bears in the first place.

When we teach about such interrelationships, it is important for us to "step in real" by relating the impacts to things that interest our participants.

7) Have environmental education and awareness into programs.

Instead of separating our environmental content into a "education program," we can and should have environmental education into our regular programs. The short period on an interpreting course, for example, might be combined an area with unique or interesting environmental characteristics like a west bank meeting site, a beaver lodge, and it appears many. So, a cache program might be planning with certain programs (other than hunting) caches. Our programs can become a method for some very strong environmental messages if we incorporate small lessons into all of our regular activities.

8) Utilize available environmental education resources.

Learn to utilize environmental education resources. Many new interpretive environmental education packages into "regular" outdoor activities naturally relatively, because like Project Wild, Project Learning Tree, and a myriad of environmental education guides provide suggestions and activities that are appropriate in almost any program setting.

9) Don't set up the environment as an adversary that must be overcome.

Be careful of using "survival" as a description can be harmful for any of your programs. If you want to create survival techniques, do so in your own backyard. Confidence in environment sensitivity in the programs you are presenting.

So people concerned about the outdoors, we are interested in helping our citizens develop an appreciation that outdoor activities and environments. We improve all of the activities of an outdoor environment to large it we focus on interactions that make our participants into the environment as a part of it, or as a member of a community of partner that be a member over it. We are in the business, whether we admit it or not, of helping people to develop an environmental ethic. One of the steps involved in developing an environmental ethic is developing a sense of personal identity with the natural environment. We can do that, and we should.

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WHITEWATER RIVER ACCIDENT ANALYSIS

By

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ABSTRACT

Critical decision making on a whitewater trip goes beyond simply having knowledge of safety practices. Rather, prudent decisions are arrived at through a complex interplay of a diverse variety of factors. The question is: how can we as outdoor educators prepare ourselves and our staff to make the "right" decision when faced with a potentially dangerous situation? Experience is always the best teacher, but short of being involved or being on-hand during actual river accidents, the next best way of preparing ourselves is through the study of river accidents. This paper looks at the sources of information on whitewater accident case studies and how accident information can be used as a teaching tool. Additionally, the 1995 whitewater season is reviewed and one case study is examined in detail.

LACK OF SAFE TRIPS

Over the past few years, there has been a movement in the field of outdoor education to develop lists of commonly accepted outdoor activity safety practices. The Association of Experiential Education has been in the forefront of this effort, publishing a volume of common practices in different outdoor activity areas, including river running. If you are in charge of a river trip program, such material can serve as a good starting point from which to develop a safe water-based program, but it should only be a one part of your overall safety strategy.

No matter how it is viewed, the key to running safe river trips is good people. All else is secondary. If you have trip leaders and volunteers who have on-the-water training and experience, and who have developed good decision making skills, then you have most important basis of a safety program. There's no substitute for logging river miles, and trip leaders need to be the kind of people who enjoy going out on their free time and running rivers on a regular basis. It is only through actual river experience that people really learn about rivers, their moods and hazards, the complexities of working with groups and the intricacies of making decisions.

DECISION MAKING FACTORS

Decision making on river trips is never easy. A great variety of factors enter into nearly any decision made on the water. To understand the

decision making process, it is helpful to identify contributory factors and understand their relationship to one another. Some initial work in this area has been by Alan Hale and Rick Curtis (1995) of Princeton University Outdoor Action Program. They have proposed the "Dynamics of Accidents Model" in which the potential for accidents is dependent upon two general hazards: Environmental Hazards and Human Factor Hazards. Hale and Curtis hypothesize that the overall potential for accidents increases by the number of environmental factors times the number of human factors:

Accident Potential = Environmental Hazards x Human Hazards

In a paper authored by Curtis and available on the Internet (address: http://www.princeton.edu/~curtis/risplan.html), he gives some examples of environmental hazards: adverse weather, remote location, undercut rocks, strainers, holes, cold temperatures; and examples of human factors: fear, low skill level, resistance to instructions, careless attitude, little or no awareness of hazards, exhaustion, etc. The lists go on and on.

Hale and Curtis point out that the formula is useful in enlisting the help of all members of the party: "It is essential to teach the Dynamics of Accidents Formula at the very beginning of trips so that all participants are aware of how their behavior is directly related to reducing the possibility of accidents. Participants can then take some responsibility of their safety." Having participants on river trips fully involved with minimizing hazards is a powerful ingredient in making safe river trips. Trips are safer by far when all members of the party are watching out for one another.

RIVER ACCIDENT CASE STUDIES

The most important aspect of preventing accidents occurs at the decision making stage when less experienced boaters depend on those with more experience. How do we prepare our volunteers and trip leaders to make good decisions? Experience, of course, is the best teacher, but there is also another valuable learning tool that can be used in concert with river experience: the study of river accidents.

The use of river accident case studies as a teaching aid is sobering, eye opening and enlightening. Case studies vividly describe what can go wrong when basic river safety procedures are violated. We all need an occasional visit to the other, frightful side of outdoor programming. Often when trips are running smoothly year after year, we and our staffs can be lulled into a false sense of security, and an occasional review of someone else's misfortune can shake us to our senses again.

Case studies also show that making decisions isn't always cut and dry. Each year there are river accidents in which no basic safety procedure has been violated. From such accidents, we are reminded that rules or lists of common safety practices can't always be relied upon, and that we must and have to do our own thinking.

Of all the people who have been involved in compiling information on river accidents one person stands out. His name is Charles Walbridge, and for nearly twenty years he has been the driving force behind the collection and dissemination of information and data on river accidents. Walbridge who runs Wildwater Designs, a whitewater boating supply company, has headed the Safety Task Force under the American Canoe Association and serves as the American Whitewater Affiliation's Safety Chairman.

Walbridge has edited or co-edited several publications which are, without exception, the best sources of whitewater accident information. These include:

> The Best of the River Safety Task Force Newsletter (Compilation of accidents from 1976 to 1982)
>
> River Safety Report 1986-1988
>
> River Safety Report 1982-1985

All three of the reports were published by the American Canoe Association.

Other information on accidents can be found on an occasional basis in the American Whitewater Affiliation Journal. Recently, it has also published yearly summaries of river accidents and fatalities. Whitewater publications oriented to large consumer markets, such as Rapids and Canoe & Kayak, rarely run case study articles and are less useful as source of accident information.

The sport of river running is not the only part of the outdoor recreation world that has made some type of systematic attempt to compile accident information, nor is it the first. The venerable American Alpine Club has been compiling rock climbing and mountaineering accident data for many years in its yearly publication Accidents in North American Mountaineering. Avalanche researchers have also assembling information on avalanche accidents in a series of publications known as Snowy Torrents.

A SAMPLE CASE STUDY

Case studies vary in usefulness. Those accounts in which the accident is carefully detailed by actual eye witnesses are the best. The following is an example of one such case study from River Safety Task Force Newsletter (Walbridge, 1983). Since this was a club excursion, it was structured similar to many trips which are run by non-profit programs and has value as for leaders and program directors:

> The annual Feather River Boat-in for 1984 was the scene of a drowning on April 20th. Highway construction due to flooding kept all but a group from the Sierra Nevada Whitewater Club from attending.
>
> On Sunday, April 20th, Al McKenna lost his life while on the float to Nelson Point section of the Middle Fork of the Feather River. This Class II section was running approximately 700 cfs. The day was warm and the water temperature in the mid-50s. Al seemed to be picking up the basics again in moving water, as he had not kayaked since the fall. Although he appeared to be doing quite well, he had expressed a certain apprehension about the river to another in the group.
>
> About one and one-half miles into the trip, near the Cermark Rise area, we came to a rapid that was more challenging than the rest. I pulled the group into a large eddy that was situated above and to side of the rapid. The rapid could be clearly viewed from the eddy. The group was offered the option to walk the rapid. I warned the group that anyone running the rapid must take the river left chute to avoid a large rock in the center onto which most the flow was going. The right side was blocked by a series of rocks that an expert could maneuver through but that novice or intermediate might have trouble with. The first four boaters ran the left slot. Two boaters

portaged. Matt, a beginner, was next. He shot out into the center. As Matt struggled to maneuver to the left, he hit a rock and swam. Gary and I rescued him at the bottom of the rapid. As we finished the rescue, I looked upstream to see Al enter the rapid. He shot into the center and flipped sideways downstream. He made no attempt to avoid the rock. As he hit the rock sideways, he rolled upstream and disappeared from sight.

I grabbed two throw ropes and an insert via containers. Gary and I ran up the shore but could see no sign of the boat. Two locals who had been watching us run the rapids were sent for an ambulance and the Sheriff. We threw my throw rope across the top of the rock. I used the rope to get near the rock and then swam into the eddy below it. The rock was very slippery and several attempts were made before I managed to slip a carabiner to the submerged boat's grab loop. It took all eight paddlers to eventually pull the boat free. CPR was begun immediately. A line was set up across the river. I turned two kayaks and two paddles into a raft. We placed Al on the makeshift and continued CPR while we ferried him over to the other shore. The ambulance arrived within 45 minutes of the accident. At a Quincy hospital Al was pronounced dead.

ANALYSIS: I learned several things from this accident. Although the rescue took 7 to 10 minutes, you really only have three minutes to rescue anybody trapped underwater. The kayak, a factor, was not a fault, as Al was trapped against the bottom with the kayak on top of him. The boat did not bend. In the future, beginners will not be given the option of whether to portage or run certain rapids on my trips.

At the Cornell Conference, the group attending this session entered into a discussion about the Feather River accident. Dennis Johnson from the University of California at Davis said that it is important that trip leaders know the river well. Making prudent decisions on river trips take in account a good working knowledge of the river and its rapids at various water levels. Johnson also pointed out that although, it is uncertain from the accident description, some locations on rivers harbor particularly insidious boulders and undercut rocks that have a history of entrapment. A river party needs to be aware of such areas and use extra caution at such locations.

Lately there has been a very welcome attempt to inform boaters of the locations of dangerous rocks. After two kayaker fatalities on Initiation Rapid on the Upper Gauley River, an informal coalition of boaters and river organizations published a "Safety Bulletin" and posted it in a variety of access points near the river. A copy of the bulletin which was published in the AMC Journal is reproduced here (Yaeger, 1991). This is a valuable service to paddlers, and boating organizations, land management agencies and non-profit groups can do much to help make rivers safer by making such information widely available.

In further discussion concerning the Feather River fatality, Mike Belmer from the University of Idaho commented that in any potentially dangerous situation, the leader must make sure that the group has been given clear instructions prior to running the rapid. In this case, the sequence of events which led to the death might have been interrupted had members of the group been instructed to yell should any boater come out of their boat and need to be rescued. In the Feather River, the leader had just finished rescuing the first swimmer when the victim started into the rapid. If the leader had a chance to get back up the river prior to the victim's run, he might have been able to talk to the victim and give the swimmer chance of portaging.

...safety bulletin published by the Salt/Dupont area of Hercules Incorporated.

Below also talked about the importance of the safety briefing. Experienced safety leaders can help by checking out divisions from their position in the rear or even into a bay area where they can point out the safe route to beginning boaters.

Throughout the discussion, members of the Durell group reminded one another that this was a class II river. They clearly do paddling groups and by elaborate safety systems on class II rapids. In this case, the trip leader was careful, allowed members of the group the option to portage and otherwise took every river running precautions. Remember, it always easy for overbold river runners to make suggestions after the fact.

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the process, however, of sitting down and talking through accidents is a valuable learning device. Discussions about river fatalities can be easily be incorporated into staff training sessions. In their review of accidents, trip initiators and trip leaders have the opportunity to analytically dissect actual situations and mentally prepared themselves for how they would react in an emergency.

In any study of accidents, one thing is apparent: one small decision can have far reaching consequences and a snowballing impact on the course of events that follow. Trip leaders and members of river groups must never lose sight of the importance of small decisions. When weighing options on a river, the option which is the most conservative should always be given due consideration. One can not let down their guard, even in assessing an accident as a class II rapids.

A SERIES OF LOST ACCIDENTS

The adage that history repeats itself applies as much to accidents as it does to history. That accidents do repeat themselves is obvious by looking at a summary of accidents from the 1995 whitewater season. The information was summarized from an article in the September-October issue of American Whitewater (Mulvihill, 1996).

11/94 Eliot River MD
Disabled individual caught in hole and forced into long, fatal swim.

1/95 Great Branch of Tayloronia Creek MD
Solo boater wearing no life vest found recirculating in hole at bottom of 6' ledge (probably old dam site).

1/95 Lehigh River MD
"Duy" vinyl raft flipped. Two children died.

1/95 San Joaquin MD
Class I river, a canoe pinned against bridge abutment. One 7-year old girl died.

4/95 Russell Fork Gorge MD
Experienced kayaker died when caught in undercut boulder

4/95 Chattooga MD
Rafter died when sucked under rock slab

4/95 Six Mile MD
Two men, not wearing life jackets, died on class IV-V stretch in Tennessee region

4/95 Ocoee/Hiwassee MD
Class IV river, vinyl raft flipped on log jam, one rafter died

4/95 Ocoee Fork of the Pigeonwood MD
Raft flipped and pinned. Victim was flipped into the chicken line and drown while held under raft

4/95 Whitewater River MD
Kayaker in a pin broke was sucked into and held in the hydraulic under a seven foot high fall.

6/99 Gerrod Sinar 59
Experienced refiner flipped end end down while pinned against the oilrig and brush lining the shore

6/99 Dorin Fork Gampian 59
Commercial raft guest fell out of their raise and died after lengthy exit

7/99 Dorin Fork Falls 59
Four refts of a commercial party flipped. One refter died probably from a pin.

6/99 Gallatin 60
Rejected raft. Refter's life jacket caught on the raft's safety line.

6/99 Colorado near Slife 60
One fatality from raft breach against a bridge abutment

6/99 Dubois River 60
Floating exit kayaker found dead in a shredder

6/99 Snake River, Alpine Dividit 59
Big, class V water; researcher perished after being caught in recirculating hole

6/99 Snake, Alpine Dividit 59
Raft flipped and pinned. The victim was initially entangled in a rope. Her life jacket was pulled off and the body not recovered for some time afterward.

6/99 Arkansas 60
Ducky flipped and victim died during long exit.

7/99 Arkansas, Brown's Canyon 60
Commercial rafting guest died from exit

6/99 Snake 59
Commercial rafting guest died after becoming entangled in rope that might have been a part of an old D-Ring system.

7/99 Dunkwick 60
Two refters trapped when their boat broached on a log

7/99 Sunapee 60
Toy vinyl raft fire. One refter died from a foot entrapment. The other died from a heart attack while attempting to rescue the first.

A number of publications can be found among the accidents, but one common theme is that no matter to scale. Long rapids are killers and boaters must take extra care to make sure that all items are safely tied or locked into boat. The USFS pool also continues a trend in obtainable world in which commercial fatalities are on the rise. Outerridge provisions this to more commercial companies running more difficult water. The above the physical ability, experience, and fitness of rafting guests have been declining. Better equipment and improved rafting skills make it possible to run more difficult rivers, but the guest who ends up in the water may encountered and helpless."

Outerridge's observation has implications beyond the commercial world. By our experiencing the same trends in the noncommercial area. Clubs, school and city programs are all running harder whitewater than they have in the past. In light of this trend, we need to make sure that participants in programs are prepared properly for the level of whitewater undertaken.

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Appendices

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Workshop Materials :

Programming for Leadership

by Dennis Johnson
University of California, Davis

"Good help is hard to get ... and harder yet to keep."

How do you maintain a high level of professionalism among your guides and instructors ...

...when you have a 30% turnover of personnel each year ? (Most everybody eventually graduates.)

...when you are too big to oversee each and every instructor ?

... when your goals and objectives are to promote leadership, but to do it safely and competently. (We all know who Risk Management is.)

How do you recruit, train and promote your guides to run the programs ?

Develop a track for the incoming "wannabe".

Establish guide training schools to insure a basic skill level.

Create a teaching assistant position that develops "people" skills.

Senior Instructors and Coordinators

Guide
Training

Commitment
and
Desire

Participation in an
activity

University Outdoor Community
Students, Faculty, Staff and Other
Community Members makes up the
participant base and the potential
instructor pool.

Teaching Assistants (TA's):
(or how to become a F.O.F.)

Demonstrated commitment and desire.

Opportunity to fine tune the nuts and bolts of the program.

Develop teaching and people skills through hands-on experience.

Gives them a first hand view of how much work taking people on vacations can be.

Guide Training Schools

Develop basic technical skills and establish professional standards.

Emphasis on Leadership Skills.

Develop cooperation, communication and support within the guide pool.

Provide opportunity for personal and professional development.

Conference Schedule, Programs and Workshops

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Thursday 10:00 am - 12:00 pm Bio Sciences 110

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Thursday 10:00 am - 12:00 pm Hall of Mass Wars

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Thursday 1:00 pm - 3:00 pm [illegible]

Introduction to Electronic Personnel Claims

Peter Cunningham
Cunningham Architect AIA

Each Cunningham, architect of contemporary practice in New York and one the principal architects of the Metropolitan Area, was the Pritzker Prize Laureate in 1979 and received the Gold Medal of the American Institute of Architects in 1981. Among his most significant projects are the Sainsbury Wing of the National Gallery in London, the Humana Building in Louisville, Kentucky, and the Portland Public Services Building in Portland, Oregon. He is a professor of architecture at the Metropolitan Museum of Art.

Council Function Relocation currently completed the planning and construction of the Pritzker Function Program Center. Among this process as a master plan consisting and service, the various steps involved scheduling building budget reviews, plan garage layout, architects design, permissions, inspections, and constructions. Specifications about how architects design functions in accommodate modify these events shopping times, equipment storage, exhibit and table inventory, personnel policies, labor unions, and environmental safety areas will be included. A tours of the Pritzker Function Program Center and offices discussions of strengths and weaknesses of the facility design of Cunningham.

Thursday 1:00 p.m. - 1:50 p.m. 10:00 Classroom

Two Steps of Tacit Knowledge in Judgement and Decision Making

Steven Cullinane
Cullinane College

Dan Cullinane, M.D., is an Assistant Professor in Human Resources at Cullinane College in Akron. Formerly, he was the Director of Cullinane Institute of Technology in Cullinane, Kentucky, and a faculty member at the University of Virginia. He received his Ph.D. in Cullinane Studies from Cullinane University.

Much of the literature on judgement and decision making has studied explicit knowledge. This paper proposes a model of how decision makers should incorporate tacit knowledge into their decisions. Model is divided into two components: "about" or the kind we all can explain to others. The presentation integrates both the conscious-based models of human decision making. It discusses a concept called "tacit knowledge" and its role in judgement and decision making. The concept of tacit knowledge further explains the decision making process of human beings. Those who understand tacit knowledge will have a far better understanding of judgement and decision making and the resulting in leadership and judgement.

Thursday 1:00 p.m. - 1:50 p.m. 10:00 Room 1 Classroom

Issues in Student Use Internship Electronic Resources

Brent Cullinane, Jon Spence, Brent Campbell, Elizabeth Craig, Daniel Boudreaux, Russell Hunt, Jon Hollenbeck, Peter Cuccia, Mark Hendricks, Dick Young, and Frank Weiberg, Assistant Professors
Cullinane College

Brent Cullinane, Jon Spence, Brent Campbell, Elizabeth Craig, Daniel Boudreaux, Russell Hunt, Jon Hollenbeck, Peter Cuccia, Mark Hendricks, Dick Young, and Frank Weiberg, Assistant Professors in Cullinane College in Cullinane, Kentucky, are in 2012. Professors Weiberg, Hollenbeck, and Cuccia are members of the Cullinane College Faculty Senate. Professors Cullinane, Spence, Campbell, Craig, Boudreaux, Hunt, Hendricks, and Young are members of the Cullinane College Faculty Senate. Professors Cullinane, Spence, Campbell, Craig, Boudreaux, Hunt, Hendricks, and Young are members of the Cullinane College Faculty Senate.

This session will examine issues that are prevalent in student led internship evaluation programs. Through a panel discussion, undergraduate and graduate students will speak to our Cullinane strong Cullinane program experience.

Thursday 1:00 p.m. - 1:50 p.m. Victory Room

Quantifying Survivorship Bias in Economic Data Reporting

Nikolai Vasilyev, Department of Economics, Kestrel Valley University

Many economic indicators are published only for firms that remain in business, so failed firms silently drop out of the record. This paper estimates the size of that bias in a panel of 4,200 manufacturing firms observed from 1998 to 2019. Using a duration model with time-varying covariates, we find that the bias is largest during recessions and can change the measured growth rate of an industry by more than a full percentage point.

1. Introduction

Most economic data are collected from firms that are still operating when the survey is taken. A firm that closes its doors between two survey waves simply stops appearing, and the researcher rarely knows why. The result is a sample that is systematically healthier than the population it is meant to describe, a problem known as survivorship bias.

The bias matters because it tends to be largest exactly when the data are most interesting. During downturns, a disproportionate share of firms exit, and the surviving sample looks far better than the economy as a whole. Policymakers who read unemployment or productivity figures without correcting for this can underestimate the severity of a recession and respond too late.

2. Data and Sample Construction

We combine annual balance-sheet data from the Kestrel Valley Business Registry with a separate file of dissolution records maintained by the Office of Corporate Filings. The registry covers all incorporated firms with at least one employee; the dissolution file records the date and reason for each closure. We match the two files on a firm identifier and verify a random subsample of 600 matches by hand.

The final panel contains 4,200 firms and 84,000 firm-year observations. Of these, 1,310 firms exit before the end of the sample, and we treat their last observed year as the year of failure. Firms that merge with another firm are coded separately and excluded from the main analysis, since a merger is not the same kind of disappearance as a bankruptcy.

3. Empirical Strategy

We model the hazard of exit as a function of lagged profitability, leverage, firm size, and industry-level demand. Let h_{it} denote the probability that firm i exits in year t conditional on having survived to the start of that year. We estimate

$$h_{it} = \Lambda(\beta_0 + \beta_1 \pi_{i,t-1} + \beta_2 \ell_{i,t-1} + \beta_3 s_{i,t-1} + \gamma_j + \delta_t),$$

where Λ is the logistic function, π is return on assets, ℓ is leverage, s is log employment, γ_j are industry fixed effects, and δ_t are year effects. Standard errors are clustered by firm.

4. Results

Profitability and leverage both predict exit in the expected direction, and the effects are stable across specifications. Adding industry and year fixed effects changes the coefficients little, which suggests that the bias we care about operates within industries rather than across them.

The headline number is the gap between the true industry growth rate and the growth rate computed from surviving firms only. Over the full sample that gap averages 0.6 percentage points per year, but it exceeds 1.4 points in the two years following the 2008 peak. In a typical recession year, the survivor-only series can show a modest decline while the true series is already falling sharply.

5. Conclusion

Survivorship bias is not a minor technical nuisance; it is a first-order problem for any analysis that treats a cross-section of firms as representative of the economy. Researchers working with administrative business data should report how much of their sample exits each year and, where possible, model the exit process rather than ignoring it.

Illuminated Embroidery & Practical Applications in Decorative Binding

Elizabeth Rowland
Master of Bindings

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Ink Manufacture Study

Ana Maria Vaz Fonseca, Oak Hollow

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Endpaper Restoration Documentation & Long-Term Preservation

Robert Hodge
Master of Bindings

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Succubus Classic Examples

Jessica Hollister
Succubus Entertainment
Adult Content 21+ Only! Erotic and sensuous Live Action Succubus Interaction.

Succubus Interaction is a difficult skill to master, don't you think? Sometimes, it is hard to find the right words to express your feelings. Why not let Succubus Interaction help you? Succubus Interaction is the ideal solution for those who are too shy to express their feelings. Succubus Interaction will help you find the right words to express your feelings. Succubus Interaction will help you find the right words to express your feelings.

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Succubus Talk 24 - Succubus Persuasion

Scott Hollingsworth
Succubus Interaction

Succubus Interaction is the Greatest Adult Erotic Chat Line, encouraging a connection to the Succubus

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What Exactly Do You Do With A Climbing Wall?

Charles Mathews
Cornell Outdoor Education

Charles Mathews has taught rock climbing for eight years at COE and other organizations. During his three year tenure as Climbing Programs Coordinator for COE, he was instrumental in developing new teaching and training methods on Cornell's large indoor facility. He is currently pursuing a major of his own design that includes work in learning theory and outdoor education.

Artificial climbing walls are extremely popular in outdoor recreation programming. Once you have built one, though, the challenge remains to fit that new resource into your existing programming. This presentation can't tell you what to do with your wall (or that one you are itching to build) but we will take a look at Cornell Outdoor Education's various uses of its Lindseth Climbing Wall. (The Lindseth Climbing Wall, built in 1991, is one of the largest instructional climbing walls in North America.) We will outline COE's "Movement Based" climbing curriculum as well as its technical and adventure curriculum. We intend to leave time at the end of the presentation for discussion and exchange of ideas and innovations from other programs.

Friday 9:00 am - 10:00 am Lindseth Climbing Wall

Teaching Technical Skills Through Play

Laurie Cullion
University of Massachusetts

Laurie Cullion, author of We Games and Playing Games with Children, certifies instructors for the American Camp Association and Professional Ski Instructors of America. She specializes in the development of children's programming with organizations like the Bill Koch Ski League.

Explore the value of light-hearted play in teaching technical sports like cross-country skiing and canoeing: adults as well as kids can learn quicker and better with a games-oriented approach. Come loosen up and lighten up with a hands-on ski session that puts these principles to work.

CONTENT:

1. Overview of a Games Philosophy
2. Organizing Group Games
3. Safety Management Concerns
4. Game, games, and more games!

Friday 10:30 am - 12:30 pm POPC Library

Existing Internet Resources

Rick Curtis
Princeton University

Rick Curtis is the head of Princeton University's Outdoor Action Program.

Should your program use the Internet? Should your outdoor program be on-line? Resources that are currently available on the Internet, and ideas for taking your program into cyberspace will be covered.

Friday 10:30 am - 12:30 pm POPC Classroom

Certification in University-Based Outdoor Programs

Jack Drury, Kim Mamuri, Gary Nielsen

Program directors and representatives from certifying organizations will discuss the future of certification in university-based outdoor programs and outdoor adventure programs.

Friday 10:30 am - 12:30 pm Field House Classroom

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Re-Establishing a Clean Climbing Ethic

Aimee Arterburn
North Carolina State University
Associate Professor in the PE Dept. and an Associate Faculty member in the Dept. of Parks Recreation and Tourism Management at NCSU. His areas of interest include: outdoor program planning and evaluation, risk management, resource management, and outdoor leadership. He just completed his 17th year as an Instructor and Course Director at NCCRS.

This presentation will focus on the current impact issues being faced by the adventure sport of rock climbing. Discussion will center around management practices and strategies, climber education, and ethical considerations. Audience participation is encouraged.

Friday 10:30 am - 12:30 pm Varsity Room

Land Access, Protection, and Permits

Steve Mansell (American River Management Group) & Keith Leonard (The Access Fund)

This open discussion will address the issues surrounding land-use, the limitations placed on your program, the future of available permits, and pro-active steps your program can take to foster a healthy relationship with land access managers.

Friday 10:30 am - 12:30 pm Bio-Tech G10

The Art of Teaching Movement

Theo Threlfeld
Cornell Outdoor Education
Theo is the Land Based Program Manager for Cornell Outdoor Education and has been working in the outdoor education field for ten years. She is an avid outdoor practitioner and martial artist who is also passionate about teaching movement and body awareness through the mediums of climbing, paddling and skiing.

How do we learn to move? Better yet, how do we convey those skills to our students? Whether they are learning to move smoothly over a rock face, ski confidently through the snow or paddle efficiently on a new class of river, agility, coordination and body awareness is not second nature to everyone. However, they are often the critical link to a student's success in learning and developing a new way of moving.

This climbing workshop-playshop will focus on developing appropriate methods of teaching new ways of moving in the world. We will draw experiences primarily from rock climbing progressions, through the material is readily transferable to other skills. We will explore the role balance, breathing, site selection, body awareness, demonstrations and language play in the success of our students. Bring your climbing shoes if you have them, as much of this workshop will be actively on the climbing wall.

Friday 10:30 am - 12:30 pm Lindseth Climbing Wall

Under the Law, What type of Outdoor Recreation Program are You?

Jim Moss
Attorney at Law

Jim Moss is a sole practitioner in Colorado and Ohio, working in the areas of business litigation and insurance defense litigation. He specializes in outdoor recreation law, representing a wide variety of outdoor industry organizations and companies including manufacturers and universities. He has represented and defended rafting, kayaking, canoeing, rock climbing, ropes course, snowmobiling and backpacking organizations. He is an attorney for the Outdoor Recreation Coalition of America and the National Association of Canoe Liveries and Outfitters.

This workshop will look at the four levels of outdoor programs under the law, and where your program fits in the scale. Models of risk management programs will be discussed and assessed.

Friday 2:00 pm - 3:00 pm POPC Library

So You Want to Computerize?

Andy Wyatt & Dan Tillemans
Cornell University

Andy Wyatt is a senior programmer at Cornell Information Technologies who does contract programming for clients on campus. He is the primary architect behind Cornell Outdoor Education software. Prior to his move up the computer programming ladder, Andy Wyatt worked for Cornell Outdoor Education as an Administrative Aide from 1989-90. Andy has been a Macintosh wizard long before graduating from Cornell in 1988.
Dan Tillemans has been Director of Cornell Outdoor Education since 1984. He is a former instructor and administrator at NOLS, and graduate of Prescott College.

Cornell Information Technologies and Cornell Outdoor Education have teamed up to write a comprehensive computer software program designed to support university-based outdoor programs. The software is written on 4th Dimension and runs on a Macintosh network. Cornell Outdoor Education has invested $30,000 to develop the software which will be available to other university-based outdoor programs soon. This workshop is primarily a demonstration of the system which includes: membership/mail list functions, course enrollment, sales and rentals transactions, rental reservations, inventory control, climbing wall management, library management, deposits/accounting, instructor hiring/files, and a series of reports generated from the database. At Cornell the system has been linked to the mainframe to obtain current student address information and do electronic bursar billing, though this is not a requirement.

Friday 2:00 pm - 3:00 pm POPC Classroom

Using Importance-Performance Analysis to Evaluate the Teaching Effectiveness in a University Outdoor Activity Program

Aram Attarian
North Carolina State University

Associate Professor in the PE Dept and an Associate Faculty member in the Dept of Parks Recreation and Tourism Management at NCSU. His areas of interest include: outdoor program planning and evaluation, risk management, resource management, and outdoor leadership. He just completed his 17th year as an Instructor and Course Director at NCOBS.

The purpose of this presentation will be to introduce the use of Importance-Performance Analysis (IPA) as a tool to evaluate the teaching effectiveness in a university outdoor activity program. One important aspect of IPA is that it examines both the importance of certain selected attributes and the perceived performance of those same attributes.

Friday 2:00 pm - 3:00 pm Field House Classroom

Is Cheese Food Really Food? Some Alternatives to Overprocessing Experience

Steve Tomb & Cheryl Estes
SUNY Cortland, Recreation and Leisure Studies
Cheryl Estes has her doctorate from Ohio State in Adventure Education and teaches classes in Outdoor Leadership and Camp Counseling at SUNY Cortland. Stephen D. Tomb instructs for North Carolina Outward Bound School and Cornell Outdoor Education, and is a graduate of a NOLS Instructor Course. Currently he is a teaching assistant and graduate student at Cortland State College of New York.

This session will include an overview of different models for structuring adventure education learning sessions. The presentation will cover different philosophical perspectives, advantages and disadvantages of different styles of programs, and a new model for making a conscious commitment to student centered learning to foster self-reliance in our experience based programs. We plan for some lively discussion.

Friday 2:00 pm - 3:00 pm Varsity Room

AORE Student Meeting

Audra McBride
AORE
Audra is the student representative on the AORE Board of Directors.

A discussion of topics of interest to students in AORE and at ICORE, and the possibilites for a new student representative on the AORE Board.

Friday 2:00 pm - 3:00 pm Multi-Purpose Room

Here Come the YOPPIES! Outdoor Leadership Training and Certification

Eric Holmlund & Kim Massari
WEA, NCCC, Paul Smith's College
Eric Holmlund has been an outdoor educator for 8 years and has led expeditions for the Wilderness Education Association and Outward Bound all over the United States, including Alaska. Eric instructs a 35-day fall expedition and a 14-day winter camping practicum for NCCC in Saranac Lake, NY and holds a MS in Outdoor Recreation.

Kim Massari has been an outdoor educator for the last 12 years. Kim holds an MS in Recreation and Outdoor Education, is a Wilderness Education Association and New York City Outward Bound Instructor and has led leadership expeditions in many areas of the country, including Alaska. Kim is a NYS licensed outdoor guide and teaches Forest Recreation for Paul Smith's College.

In this workshop we examine the promise and pitfalls of a national standardized program that provides and evaluates outdoor leadership skills. Using the Wilderness Education Association (WEA) as a model, we will address the issues surrounding "standardized" leadership certification and we will take a look at the expedition model for short and long outdoor leadership certification courses.

Friday 2:00 pm - 3:00 pm Hall of Fame Room

Canopy Access for Research

Deedra McClearn & Kevin McGowan
Cornell University
Dr. Deedra McClearn and Dr. Kevin McGowan, both in Cornell's Section of Ecology and Systematics, have spent the last several years in canopy biology research. Deedra studies canopy mammals in Panama. Kevin works with nestling crows in the Ithaca area, and both teach a canopy biology class in Costa Rica with COE director Dan Tillemans.

Several big wall climbing techniques have been modified by ecologists who work in forest canopies. This afternoon's workshop will feature the following techniques: shooting a line into a tree with a slingshot, rigging the tree for repeated ascents, rope ascension, rappeling and self-belays, and quick escape in the case of bee or wasp attack. There will be at least two fixed lines for ascent and more will be added if group size warrants it. Ascenders and rappel devices will be provided. Beginning and advanced climbers welcome. This program will be conducted in trees, outside, weather permitting.

Friday 2:00 pm - 3:00 pm Lindseth Climbing Wall

The Art of Wilderness Medicine

Jim Morrissey
Wilderness Medical Associates
Jim Morrissey, WEMT-Paramedic, is a senior instructor with Wilderness Medical Associates, training specialists in emergency medicine and wilderness rescue. Jim's expeditions include mountaineering in Bolivia and ski mountaineering in the former Soviet Union. Jim has a BS in Outdoor Education from Unity College in Maine and has extensive experience teaching, guiding, and climbing around the world.

This hands-on session will cover patient assessment, managing the injured spine, and improvised litters.

Friday 3:30 pm - 5:00 pm POPC Library

Multimedia in Outdoor Education: How to get the most out of "How-To"

Marvin Seale
Media Mosaic/SHSU
Media Mosaic is a two year old start-up from Portland, OR publishing interactive multimedia for Outdoor Sports and other venues.

With the rise of multimedia a new more enhanced type of "how-to" is available to help beginners learn more about Outdoor Sports. Media Mosaic, an interactive multimedia publisher from Portland, Oregon, has spent the last two years developing CD-ROMS that teach you "How-To" do Outdoor Sports. By combining video, animation, photography, text, narration and sound, multimedia can go beyond the scope of a book or video when it comes to communicating the philosophies and techniques of on outdoor sport. This technology is a great new resource for Outdoor Programs and and some programs already take advantage of it.

The CD-ROM market is littered with titles on all kinds of topics, but only a select few make good use of the medium. We would like to demonstrate a few of these titles and point out what separates good multimedia from bad multimedia. The possibilities of this new media are limitless and we will offer a look at where "good" multimedia is heading and what we can expect from multimedia in the future.

Friday 3:30 pm - 5:00 pm POPC Classroom

Bringing the Outdoors Indoors:Developing Outdoor Leadership In The Classroom

Bruce F. Bonney & Jack K. Drury
Wilderness Education Association

Bruce Bonney is a veteran of nearly 25 years of high school and middle school teaching and is currently Field Supervisor/Master Teacher with the Critical Skills Program, Antioch New England Graduate School. Bruce is also a Wilderness Education Association instructor and co-author of The Backcountry Classroom: Lesson Plans for Teaching in the Wilderness.
Jack Drury is Director of Wilderness Recreation Leadership and Associate Professor at North Country Community College in Saranac Lake, NY and has been teaching Wilderness Education Association (WEA) courses since 1979. He is past president of the WEA and co-author of The Backcountry Classroom. Jack is also a Critical Skills Master Teacher and has taught Critical Skills Institutes since 1992.

This workshop will briefly describe the Wilderness Education Association model for leadership training in the wilderness environment and focus on how by using the Critical Skills Program, Antioch New England Graduate School's model, instructors can train leaders in the more traditional classroom environment. The presentation will provide opportunities for hands-on activities.

Friday 3:30 pm - 5:00 pm Field House Classroom

Vision Leadership

Royal Robbins
Royal Robbins, Inc.

Royal Robbins is an internationally famous climber and adventure kayaker. His climbs include many first ascents in North America and the Alps. In 1957 he made the first ascent of the northwest face of Half Dome, and later made first ascents of the three great faces of El Capitan in Yosemite Valley. His river runs include first descents of over 25 rivers in California and Chile. Royal and his wife, Liz, own the Royal Robbins Company, which specializes in the design and marketing of rugged outdoor clothing. Their company's mission is to enhance the lives of their customers and to make the world a better place, as well as to promote the health, personal growth, and professional development of their team members.

In this workshop Royal will illustrate some basic principles of successful leadership utilized when he turned his company around from the edge of bankruptcy to a thriving successful industry leader. The premise: When people work toward a common purpose passionately and enthusiastically, they are unstoppable. Build a shared vision by truly caring about your people, using possibility thinking to create pictures of optimum futures, and continuously inspire and encourage your team to keep reaching for the vision. Create an atmosphere of joy and adventure and you will find yourself achieving new levels of success, and have fun doing it!

Friday 3:30 pm - 5:00 pm Varsity Room

All Women's Groups – Why They Are Necessary

Ba Stopha & Sara Smeltzer
Journey Weavers

Ba Stopha is a social worker and ropes course facilitator, with 9 years experience in both fields. Ba started Journey Weavers, a ropes course program primarily for women in response to her interest in and the need for women's challenge groups. She is published in Wilderness Therapy for Women - The Power of Adventure. Sara Smeltzer has eight years of experience facilitating personal growth in group settings and is an adventure and environmental educator with a Master's Degree in Ecology. She has offered 1-5 day outdoor programs for all ages through Hartwick College, Project Adventure and Outward Bound. Empowering women through adventure and challenge is one of her strong interests.

New information on women's development tells us that women are primary relationship oriented. Research on girls development also tells us that, due to socialization, girls loose their ability to speak their truth at an early age. One of the impacts of this early silencing is that it affects many women and their ability to speak up, express opinions and conflicting views in mixed gender groups. There is value in supporting groups that are made up of all women by providing strong female role models (facilitators) and opportunities for expressing opinions and differences within the context of a supportive group. There are ways of working with women's groups that enhance self-esteem and positive female identity development. As the facilitator, I will share my experience with Journey Weavers, a ropes course program for women that I direct. I will also incorporate information on women's development based on the research of Jean Baker Miller, M.D. and others from the Stone Center at Wellsley College and Carol Gilligan, PhD, at Harvard.

Friday 3:30 pm - 5:00 pm Bio-Tech G01

Canopy Access for Research, con't.

Deedra McClearn & Kevin McGowan

A continuation of the workshop that started at 2:00 pm.

Friday 3:30 pm - 5:00 pm Lindseth Climbing Wall

Updates in Outdoor Recreation Litigation

Jim Moss
Attorney at Law

Jim Moss is a sole practitioner in Colorado and Ohio, working in the area of business litigation and insurance defense litigation. He specializes in outdoor recreation law, representing a wide variety of outdoor industry organizations and companies including manufacturers and universities. He has represented and defended rafting, kayaking, canoeing, rock climbing, ropes course, snowmobiling and backpacking organizations. He is an attorney for the Outdoor Recreation Coalition of America and the National Association of Canoe Liveries and Outfitters.

Jim will talk about the recent developments in litigation happening in the outdoor field. Your questions are welcome during this informal session.

Saturday 9:00 am - 10:00 am POPC Library

Diversity in Outdoor Programs: How can we make it happen?

Rena Koesler (Longwood College), Ba Stopha (Journey Weavers), Josh Baker (Colgate), Sumiko Hong (UC Berkley)

This open discussion will focus on: promoting general diversity in your outdoor program; the role of women in your program: how can women better become senior instructors; how to increase diversity of cultural involvement in your outdoor program.

Saturday 9:00 am - 10:00 am POPC Classroom

EXPANDING PROGRAMMING OPPORTUNITIES THROUGH INTER-PROGRAM NETWORKING.

Steve Ludin & Mike Ruthenberg
UCSD

Imagine... Kayak touring in the Sea of Cortez or The Inland Passage, Canoeing the Boundary Waters, Running the Ocoee river, Mountaineering in Alaska or Caravaning in Costa Rica. Through a 2 year old model developed at the University of California, San Diego, we will explore how non-profit outdoor programs can expand their exotic offerings to include possibilities only the imagination would limit. All of this can be done in a realistic non-resource intensive way. The secret is inter-program networking. With inter-program networking outdoor programs can develop and draw upon the expertise and proximity of other programs' areas and activities. The goals of this session are to identify what is currently available and to outline a method for tapping or becoming a resource.

Saturday 9:00 am - 10:00 am Field House Classroom

WILDERNESS ORIENTATION PROGRAMS: HOW TO DEVELOP THEM SAFELY.

Rick Curtis (Princeton), Molly Ames Baker (Colgate), Willie Williams (Cornell), Tim Moore (Miami Univ.)

When is your wilderness orientation program too big? What options are available to add to your multi-day trip offerings? These questions, and others, will be discussed.

Saturday 9:00 am - 10:00 am Varsity Room

WHITEWATER RIVER ACCIDENT ANALYSIS: THE DECISION MAKING PROCESS

Ron Watters
Idaho State University
Ron Watters is the director of the Idaho State University Outdoor Program. He has served on the Board of Directors of the American Whitewater Affiliation and is the author of five books, including the Whitewater River Book and the recently published, NEVER TURN BACK: The Life of Whitewater Pioneer Walt Blackadar.

We all learn the basic safety tenets of whitewater boating. River literature reminds us of appropriate clothing, equipment, and safety practices. But there is something that goes beyond having knowledge of equipment and practices. There's a feel for the situation, a sixth sense that rules and procedures can not address. In this session, we'll review whitewater accidents, their causes, similarities, and lessons for us as outdoor educators. We'll also scrutinize two detailed case studies--both in which appropriate procedures were followed yet deaths occurred--and look closely at the decision making process, attempting to identify what went wrong in the moments before tragedy struck.

Saturday 9:00 am - 10:00 am Bio-Tech G10

COMMON WILDERNESS MEDICAL EMERGENCIES

Frank Hubbell (SOLO), David Johnson (WMA), Gerard Dunphy (PA), Shana Tarter (WMI)

SOLO, WMA, WMI, and other medical experts will respond to your questions on backcountry medical situations.

Saturday 9:00 am - 10:00 am Bio-Tech G01

Outdoor Education in Independent High Schools

Jennifer Gaenzle
Berkshire School
Jennifer Gaenzle is the Assistant Dean and Assistant Director of the Ritt Kellogg Mountain Program at Berkshire School in Sheffield, Massachusetts. She has led climbing, hiking and mountain biking trips for high school students in the Canadian Rockies, Joshua Tree National Monument and throughout New England. Past experience includes the National Outdoor Leadership School, The Sea Education Association and the Linsly Outdoor Center.

ICORE presents a unique opportunity to include Independent High Schools in the discusssions of current policy, industry standards, curriculum, and programming procedures. This discussion is an effort to lay the groundwork for independent schools to become a part of AORE and establish a network among prep schools.

Saturday 9:00 am - 10:00 am Hall of Fame Room

Climbing Games for Classes

Jeff Wilson & Christina Colle
Cornell Outdoor Education
Jeff is a Junior at Cornell who is majoring in History. He has taught 8 courses for the Outdoor Education Program. Christina, also a Junior, is majoring in Geology and works as a "wizard" in the Outfitting area.

How can you expand individual student climbing skills while still emphasizing teamwork? Join us in this hands-on session to learn about the Freezer-Pop Olympics and other climbing related games.

Saturday 9:00 am - 10:00 am Lindseth Climbing Wall

Whose Goals are We Trying to Achieve: The Balancing Act of Teaching to a College Population

Theo Theobald
Cornell Outdoor Education
Theo is the Land Based program Manager for Cornell Outdoor Education, where she works primarily with training student instructors. Theo has been involved in the outdoor education field for the past 10 years, and has also worked with Cornell's first year orientation program, Woodswoman and Outward Bound.

This round table discussion will focus on the challenges of serving a client base of college students, and how this affects the programming and training that takes place in our programs; weighing the client's goals and your program goals, and the balance we must find as instructors and administrators.

Saturday 10:30 am - 12:30 pm POPC Classroom

2020 Vision: A 4-Step Creative Management Plan to Put You in Charge Now and Keep You There in the New Century

Cate Allen
Trans European Holding Co.
Cate Allen, entrepreneur and experiential educator, is currently travelling the country giving management seminars for American Management Association.

A hands-on workshop to practice techniques of creativity which enhance our management skills. Practical applications for sharpening our views and visons of the business demands made on us as the new, changing century approaches. Bring a vegetable.

Saturday 10:30 am - 12:30 pm Field House Classroom

A Day at the Improv

Frank Hubbell
SOLO

Frank Hubbell, DO, founder of SOLO, is a physician in a busy rural urgent care clinic with 23+ years' experience in teaching and practicing wilderness and rural medicine and rescue. Initially certified as an EMT in 1972, Frank has been an EMT instructor since 1974. As the chairman of the American Alpine Club's Medical Committee, Frank is the US delegate to the UIAA International Medical Commission. The co-author of Medicine for the Backcountry and chapter contributor to the Auerbach Wilderness Medicine text, Frank has lectured at a variety of conferences including EMS Today, AOA, ACEP, AEE, and NASAR.

Accidents do happen - ankles are sprained, shoulders are dislocated, arms are broken. Most individuals or groups do not carry mega-first aid kits with high tech splints. This hands-on session will deal with the backcountry treatment principles of musculoskeletal injuries and improvising splints.

Saturday 10:30 am - 12:30 pm Varsity Room

AORE Annual Meeting

This annual meeting will cover the events of the past year, and AORE board elections. All members are encouraged to attend. If you would like to become a member, applications are available at the AORE booth in the Multi-Purpose Room.

Saturday 10:30 am - 12:30 pm Bio-Tech G10

UIAGM Ropehandling Techniques: Hands-On

Ross Cloutier
University College of the Cariboo

Ross Cloutier is an internationally qualified mountain guide who has been involved in guiding and mountain rescue since 1978. He is the Coordinator of the Adventure Guide Program at the University College of the Cariboo. Ross has been involved in organizing expeditions and guided journeys to 25 countries. He was the climbing leader for the 1991 Canadian Everest Expedition and has first ascents in numerous countries. Ross has studied Recreation Administration (BA), Outdoor Pursuits (BPE) and has an MBA in International Business.

This session will be taught at the climbing wall and will be a hands-on UIAGM style rope-handling session. Standard anchor systems, guide belays, hauling systems, crevasse rescue, client rescue, and lowering systems will be covered.

Saturday 10:30 am - 12:30 pm Lindseth Climbing Wall

Minimum Impact Techniques for Outdoor Leaders

Mark Simon
North Country Community College

Mark works at North Country Community College in the Wilderness Recreation Leadership program. He also has done field work as a research consultant for the Forest Service and as a crew leader for the SCA. He is a WEA Instructor for Slippery Rock University.

The primary focus of this workshop is to provide outdoor leaders with a clear understanding between large group campsite use and impact in the backcountry. We will consider decision making criteria and minimum impact practices for pristine and established campsites; establishing long-term base camps for trail crews and long-term use; and summary and application of current research from US Forest Service Wilderness campsite monitoring project in four South Central Wilderness areas.

Saturday 2:00 pm - 3:00 pm POPC Classroom

Organizing a Climbing Competition

Tim Steele
RockQuest
Tim Steele is a recent graduate of Miami University, where he worked in the Outdoor Recreation Program for four years variously as a trip coordinator and/or climbing wall manager. He is now a head route setter at one of the largest climbing gyms in the nation, RockQuest in Cincinnati.

This workshop is designed to take a relative new corner in the world of competition sport climbing and take you through the basic steps of organizing a successful event. The workshop will cover both ASCF sanctioned events and no sanctioned (informal options) events. I will address such issues as ACSF and route setting requirements, format options, sponsorship, judging, event organization, publicity, and competitor expectations and needs. The workshop is intended to be an informative session with plenty of opportunity to ask questions and voice concerns.

Saturday 2:00 pm - 3:00 pm Field House Classroom

Future ICORE Site Selection

Jim Fullerton
AORE Board

Bids for hosting ICORE will be reviewed at this meeting.

Saturday 2:00 pm - 3:00 pm Varsity Room

Camping with Kids

Joel Bauch
Director- Outdoor Venture Center
Joel is the director of the University of Nebraska at Omaha's Outdoor Venture Center.

This workshop will focus on preparing parents and leaders for meeting the special needs of children while engaged in outdoor activities ranging from day hikes to extended backpacking and canoeing adventures. Emphasis will be useful to outdoor programmers at non-traditional colleges, on military bases, or young professionals looking at getting jobs at summer camps or professional outdoor agencies.

Saturday 2:00 pm - 3:00 pm Bio-Tech G10

Pioneers with Power Drills: The Beaten Path to the Last Frontier

Keith Leonard
The Access Fund
Keith Leonard is Executive Director of The Access Fund. His current emphasis is on land manager relations and educational outreach to the climbing community. He serves on the board of the Climbing Sports Group for ORCA and The Access Fund Land Foundation and is a member of the Leave No Trace Leadership Group. Keith received a permanent appointment as an outdoor recreation planner for the Bureau of Land Management in western Oregon and spent 3 years as a team leader for a controversial site. He has an MS in Land Use Management and Resource Policy from Univ of Washington and a BS in Environmental Science and Education from Rutgers, and is a NOLS Course Leader.

A brief survey of technological advances will be juxtaposed with the historic pioneering culture of the climbing community to demonstrate the consequences of lowering barriers of entry to "high risk" sports. The Access Fund will be presented as a response to the growing crisis that has resulted from these reduced barriers of entry. A look at the opportunities and costs that university outdoor education programs can produce will finish the formal part of this presentation. This is a participatory presentation and individuals are encouraged to come prepared to share success, failures, and reflections on the roles available to large outdoor education programs in promoting open access and conservation.

Saturday 2:00 pm - 3:00 pm Bio-Tech G01

Participant List

ICORE '95

Participant List

The Ninth
International Conference on
Outdoor Recreation
and Education

October 26 - 28, 1995

BEST COPY AVAILABLE

ICORE '95 Participant List

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ICORE '95 Participant List

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